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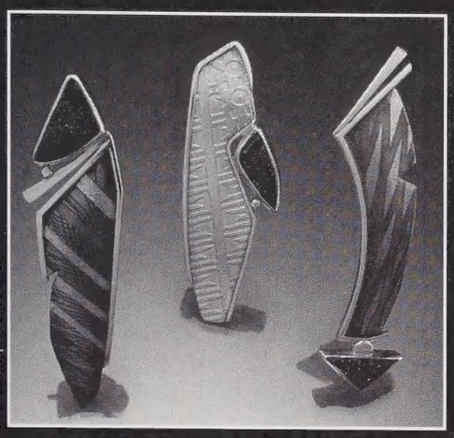

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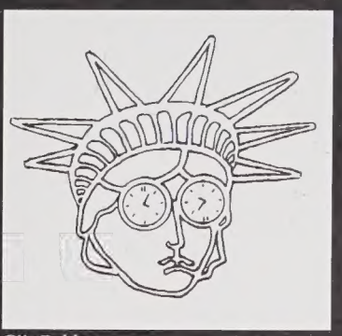

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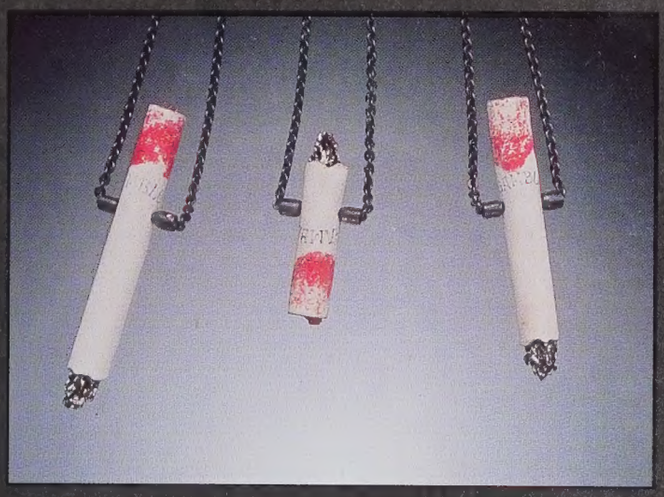

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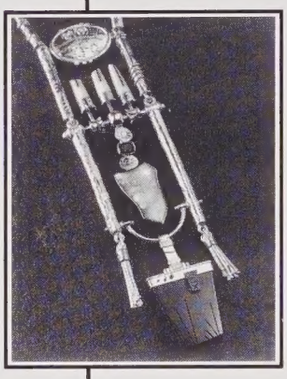

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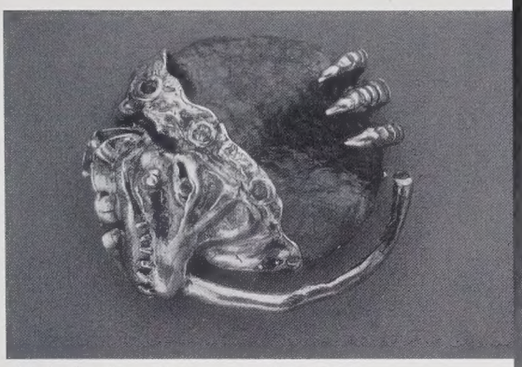

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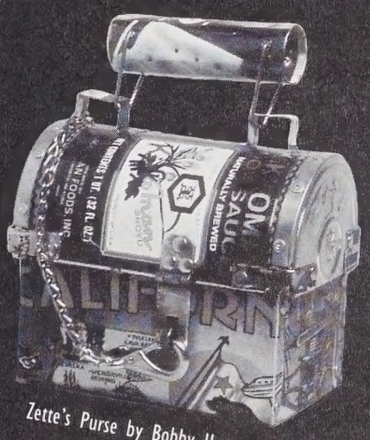

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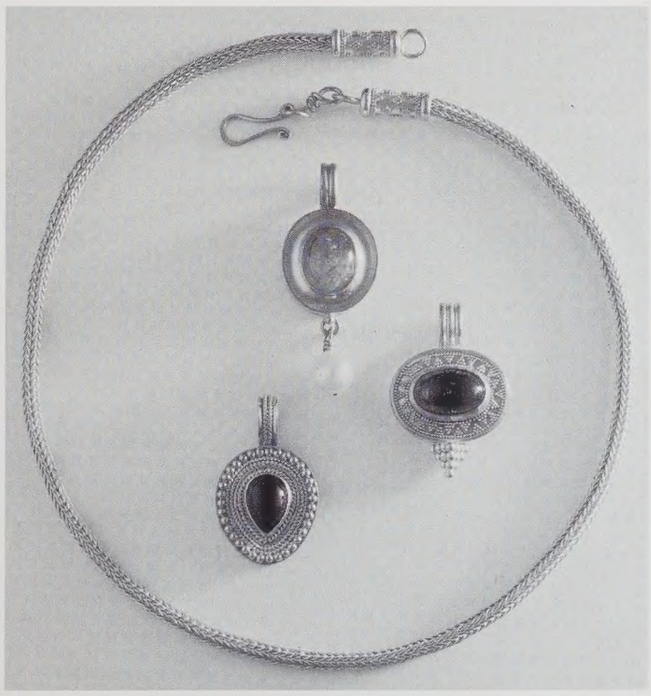

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Metalsmith

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Editorial

"What has happened to beauty?" I hear this question from students and many of the readers of this magazine. What becomes clear in conversations, more often than not, is that many of these individuals think of beauty as something fixed, absolute, and universally constant. When they ask the question they trust that I know exactly what they are referring to, as if beauty is like karat or weight, a measurable and objectively confirmed quality of works. Certainly this attitude is not new, it has been at the root of the western philosophy of aesthetics, since Aristotle, if not before.

In further discussion it becomes clear to me that many of these individuals are disturbed by what they perceive to be the assault on beauty by a variety of polemical, political, socially conscious, ethnically self-conscious, and activist jewelers. "Why do we have to see *ugly* work?" "Why should so much contemporary work concern itself with *issues* as opposed to the universal beauty of form, materials, and creativity?" I must confess that though I understand the question I am confused by its assumptions.

I come across many objects that I think are beautiful, but I do not necessarily expect that everyone else will be equally impressed. While I resist the term, I also sometimes have what others may call a "*spiritual*" experience in front of various works. In my thirty year study of the history of art I have frequently found myself appreciating what *experts* declare are "masterpieces" (though I am still bothered by the gender-bias of the term). Yet I do not assume these works are or should be lauded because their aesthetic qualities are timeless and universal. Such aesthetic imperialism does not sit well with my study of histories and cultures. People are too constructed, too composed of the vagaries of culture, experience, genetics, psychology, and chance for me to believe in an *essential* aesthetic absolute.

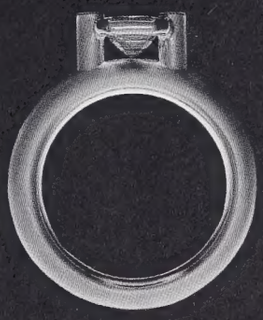
With even the most polemical work, individuals are usually able to articulate their aversion or admiration. Even if their resistance is based on prejudice, they most often are able to engage in a specific dialogue about the things they do and do not *like* in a work. In the case of beauty however, many people only point to and identify formal elements, as if the aesthetic of a particular color, line, or shape needs no explanation. Many arguments for beauty depend on a kind of exclusivity: either you see it or you do not. And if you do not then you are lacking in taste, sensitivity, essential humanity, or spirit? Paul De Man even made an interesting argument that aesthetic formalism was a manifestation of early 20th century totalitarianism.

To my way of thinking, that kind of exclusivity is contrary to what a publication is supposed to do. I think that this magazine features many beautiful works of art. Their beauty resides in their effectiveness. If an artist seeks to create a sense of peace in a work, the gradual curve of a line and the smooth sheen of gold is probably an effective and measurable means to this end. On the other hand, the complexity and the historical uses of art have also furnished us with a number of cases whereby the traditional aesthetic western canon of beauty is a most ineffective way to make a point.

I like to think that over the course of any particular year, *Metalsmith* has managed to reproduce the entire spectrum of artistic goals and functions. There are number of beautiful things in the magazine every issue, sometimes we just need to poll our intellect to find them, not just our eyes.

FCL

WHITNEY BOIN STUDIO



amy: when Matt proposed, he hid the ring in the petals of a dozen long stem roses
allison: Jason hid mine in a piece of apple Pie his mom baked from an old family recipe
jen: really, how sweet... Sean found mine in the pages of some design magazine, it's the Post ring by Whitney Boin.
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jen: Allison... Allison, are you still there?

jen: Amy?

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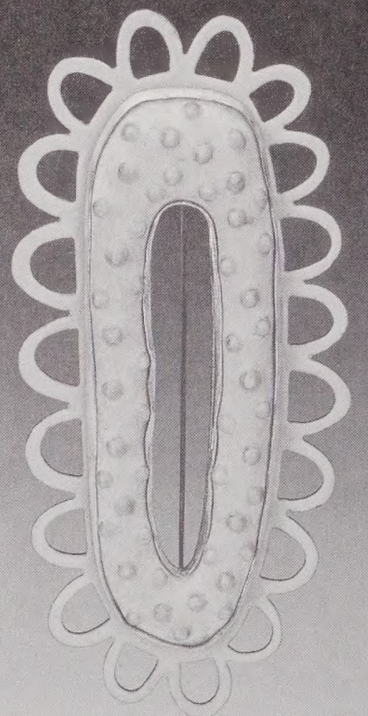

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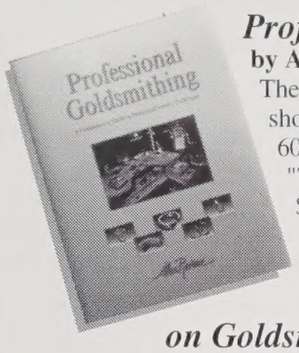

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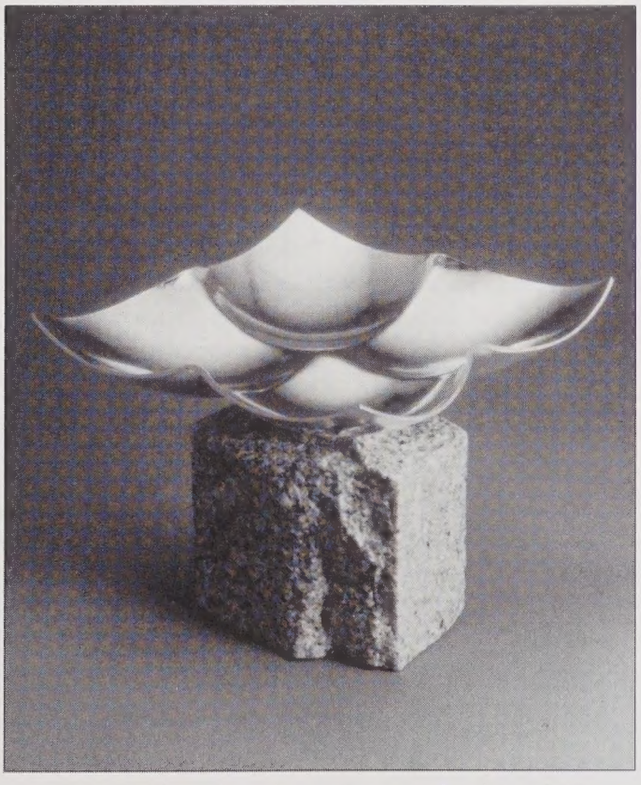

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Letters

Dear Editor:

The following is a response a recent editorial. It is written to the readership of Metalsmith.

I've always thought that an editorial written by the editor of a magazine would be a carefully considered piece of writing, perhaps even a showcase for the talents of the editor. I assumed that it was a piece of writing that was intended to set the tone for the standard of writing quality in the magazine. Sadly, Frank Lewis's editorial in the Spring, 1997 issue of Metalsmith indicates the level of "intellectual rigor" to which Metalsmith, under Mr. Lewis's editorship, has sunk.

As a teacher, I am tempted to go through this entire piece with a red pencil. But honestly, I am bogged down with Mr. Lewis's opening sentence. Is "contemporary Romanticism" a topic that hits the pages of Metalsmith with such regularity that there is no need to define this "moribund subject"? (Or is it "romanticism", or *"romanticism"?* Each of these styles is utilized in the page-long editorial, un-conventional styles whose inconsistency confuses readers. Please pick a convention and stick with it!) Mr. Lewis launches into an attack on everything from "artists in defense of their production", to advertising, to empowering artists, to a truly weird statement in defense of his limitations as a father.

It is difficult to wade through the run-on sentences, the misspelled words and incomprehensible arguments in an attempt to follow Mr. Lewis's train of thoughts with regard to "contemporary Romanticism" (sic) If a reader makes it to the end of this piece, he or she is rewarded with a true gem of an editorial oversight, in which Mr. Lewis threatens to "...melt everyone of my Brahams CDs." Mr. Lewis's cute postscript indicating his insightful usage of "spell check" is quite a let down after this blunder. A computer will indicate that "everyone" is indeed spelled correctly, but it requires an editor to realize that it is simply the wrong word in the context of this sentence. "Brahams"? Perhaps those are Brahms CDs that Mr. Lewis would like to melt.

This piece seems to have little to offer the readership of Metalsmith: indeed, it reads as some sort of personal rebuttal to an argument to which we are not privy. As a teacher, I would scrawl "RE-DO" across this incoherent effort. As a reader of Metalsmith, I am simply stunned to see such a ridiculous essay in print. Something isn't working well when our editor needs an editor.

Deb Stoner

Editor's Response:

Dear Ms. Stoner:
I appreciate your perspicuity in pointing out errors in the spelling of *Brahams,* and in the incorrect use of *everyone.* These were, in fact, mistakes which should not have found their way into the magazine. The pressures of deadlines and the nature of my contract for the production of *Metalsmith* do occasionally create an over dependence on spell check.

While I am not interested in producing a defense of my "intellectual rigor" or my lack of such a quality, I would like to point out that my stylistic conventions are based on *The Chicago Manual of Style.* This volume both allows and encourages the use of italics for emphasis, to imply multiple meanings, to suggest ambiguities in common usage, and when using a word as a word. The manual also states that book and magazine titles should be italicized in typeset copy. (I have, however, allowed your emphatic underlining of *Metalsmith* to remain in your published letter.) Though you may not agree, I assure you that I am consistent with the parameters set by the University of Chicago Press.

In my twenty plus years of publishing, I have never worked with an editor who would not relish another individual to edit them. As I am fallible and often isolated in my one person office I too, would cherish such assistance and oversight.

Finally, I sincerely thank you for being such a careful and critical reader of this publication.

Frank C. Lewis, Editor

Dear Editor:

Please note that there are factual errors in the description of my jewelry. (*Metalsmith 1997 Exhibition in Print*)
1. The stone *is* tension set. The platinum plug is on the opposite side of the pendant from the stone and creates the pressure along the axis of the piece which holds the stone.
2. There is not a German company which has mechanized the technique of making anticlastic jewelry. There are companies that make copies of our jewelry by *electroforming,* which is not the same process. Nor does the piece look the same or work the same.

I would appreciate having this correction published in your magazine.

Michael Good

Dear Editor:

All of the pieces that appeared in "Observations, Sharon Boardway", Summer 1997, were part of a show at the Works Gallery in Philadelphia. I'd like to thank the wonderful staff there, working under the direction of Ruth Snyderman.

Also a thank you to New Directions Publishing Corporation, for allowing me to use in my slate necklace an exerpt from a William Carlos Williams poem, "The Rose."

But most of all I would like to thank Michal Ann Carley for her authorship of "Observations, Sharon Boardway".

Thank you Michal Ann, and thank you *Metalsmith* magazine.

Sharon Boardway

Dear Editor:

Congratulations on "Studio Multiples," *Metalsmith* magazine's *1997 Exhibition in Print.* The essays were well researched and written, as were the explanations of each artist's biography and art making processes. The curators came up with a great concept for the issue and then selected excellent examples to validate it. It may create a new frame of reference for makers and wearers of jewelry.

Thanks to you and to the editorial committee for choosing such able curators for this year's *Exhibition in Print.*

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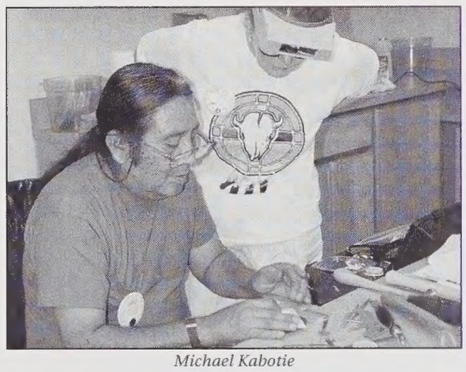

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Meditation on Metallurgy

Text by Elizabeth Jones

... Not everything is metal, but metal is everywhere. Metal is the conductor of all matter....And thought is born more from metal than from stone....

– Gilles Deleuze and Felix Guattari (411)

Rarely in philosophical discourse does one come across texts which place metalsmithing at the core of their content. Fine arts generally dominate philosophical thinking and perhaps this prejudice explains the drift of metalsmithing towards the fine arts in academic circles. It is refreshing, therefore, to discover metalsmithing as the model for freedom projected in *A Thousand Plateaus: Capitalism and Schizophrenia (1980)* by Gilles Deleuze and Felix Guattari. I will present an overall view of the authors' theories followed by an examination of their musings on metallurgy and freedom. The materiality of metal, its formless form, the lifestyle of the metalsmith, and their relationship with sedentary and nomadic societies will guide our investigation.

Deleuze and Guattari analyze our postindustrial age with an encouraging optimism, born of their awareness that multinational capitalism systematically undermines all systems of control. Rather than creating solutions which engender contentment, capitalism maintains a continuous movement and flux which fuels an insatiable state of desire. Possession is not the object of desire. What desire demands, above all, is desire, to be kept in a continuous state of suspension, with no conclusion and no satisfaction. The market economy depends on a dissatisfaction which generates a constant circulation of goods and money, a pure state of movement, which the authors call "pure speed" (Deleuze 411). Discouraging as this may sound in terms of contentment, Deleuze and Guattari find hope in the fact that dissatisfaction breeds perpetual revolution, resisting all centralized control and creating pure freedom. They liken this freedom to the processes of thought where "thought...lives solely by its own incapacity to take on form, bringing into relief only traits of expression in a material, developing peripherally, in a pure milieu of exteriority, as a function of singularities impossible to universalize, of circumstances impossible to interiorize" (Deleuze 378).

Although many critics, such as Donald Kuspit, utilize these theories to explain the schizophrenic behavior of fine arts in the eighties, Deleuze and Guattari use metalsmithing to explain their concept of postindustrial freedom. Just as thought resists form or the imposition of an exterior universalizing force, metal resists form. True, metal can take form, but it is never restricted to a form. Metal can be as thin as paper, as solid as a rock, as liquid as water, as colorful as the rainbow, as luminous as light, or as opaque as the night. Metals cross over into every organic form as salts and minerals, expressing a "vital materialism" unprecedented in other substances (Deleuze 411).

In fine arts, many philosophers, such as Martin Heidegger, discuss the relationship between form and matter, where an exterior form is forced upon a material without regard for its inherent properties. The artist transforms stone into flesh in spite of the fact that stone and flesh have nothing in common. Mind controls matter. This argument places art squarely in the realm of thought rather than intermediate between thought and physical reality.

To speak of form and matter in relation to metals is useless. We have seen that metals take all forms and therefore cannot be associated with a particular form. It is the transforming material par excellence, never definable as a form nor even as a matter or substance. Metal has the continuous ability to alloy, mix, and change substance. Its variability links metal more to formlessness, chaos, and mobility than to anything that will fit into a pigeon hole. Metalsmithing is *the* art form of the most mobile of all cultures, the barbarian or nomadic cultures. For Deleuze and Guattari, nomad jewelry and weapons best represent the mobility of freedom.

But something lights up in our mind when we are told that metalworking was the "barbarian," or nomad, art par excellence, and when we see such masterpieces of minor art. These fibulas, these gold or silver plaques, these pieces of jewelry are attached to small moveable objects; they are not only easy to transport, but pertain to the object only as object in motion. These plaques constitute traits of expression of pure speed carried on objects that are themselves mobile and moving. The relation between them is not that of form-matter but of motif-support, where the earth is no longer anything more than ground *(sol),* where there is no longer even any ground at all because the support is as mobile as the motif. They lend colors the speed of light, turning gold to red and silver to white light. They are attached to the horse's harness, the sheath of the sword, the warrior's garments, the handle of the weapon; they even decorate things used only once, such as arrowheads. Regardless of the effort or toil they imply, they are of the order of free action, related to pure mobility, and not of the order of work with its conditions of gravity, resistance, and expenditure. (Deleuze 401) Not only does metal take all forms in general, it also takes formless form in nomadic design. Animals are depicted geometrically with haphazardly arranged body parts, moving in opposite directions. They float in smooth space against a field of flat, dynamic lines with no sense of direction. The authors credit this lack of orientation to the lack of a single perspective in nomadic life. The nomad lives by his periphery vision, a kind of haptic vision which includes all the five senses as well as an intuitive sixth sense. The vast spaces which the nomad inhabits encourage a defused, circular perspective rather than the focused perspective more suitable to urban lifestyles. "There exists a nomadic absolute, as a local integration moving from part to part and constituting smooth space in an infinite succession of linkages and changes in direction. It is an absolute that is one with becoming itself, with process. It is the absolute of passage, which in nomadic art merges with its manifestation" (Deleuze 494).

The most original force in nomadic design, which plays against that dimensionless space, is the free abstract line. Deleuze and Guattari distinguish between the abstract line and the concrete line. Other theorists such as Wilhelm Worringer distinguish between geometric and organic lines, where the geometric line of the Egyptians is accorded with the first "artistic will" towards abstraction (Deleuze 496). Geometric abstraction here counters the incessant flow of organic life forms, fixing for eternity what time keeps in perpetual movement. Unlike Worringer, our authors support the nomadic line, which includes both geometric and organic expressions, as the original abstraction. They define abstraction as "a line of variable direction that describes no contour and delimits no form" (Deleuze 499). Nomadic geometry does not fix form so that it stands still. Repetition and asymmetry mobilize geometry while organic forms become transfixed in the moving stillness of geometric repetitions. "The line escapes geometry by a fugitive mobility at the same time as life tears itself free from the organic by a permutating, stationary whirlwind" (Deleuze 499). The abstract, free line is nomadic while the concrete line belongs to sedentary cultures where the State develops abstraction primarily through writing systems. In static cultures the power of the free line is diminished through its attachment to representation and "children [forget] how to draw" (Deleuze 497).

The power of metal lives in its omnipresence in all matter and in its essential formlessness by taking all forms or by taking no form at all in

Continued from page 14

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its most famous designs. It evades all definition, all control, offering the purest model of freedom and mobility. Thought cannot contain it nor physical reality limit it. It stretches between the two realms, communicating, passing through as the ultimate "deterritorialized" material (Deleuze 415).

"Material-forces rather than material-form" may be a more potent way of describing metal objects (Deleuze 369). "In metallurgy,...the operations are always astride the thresholds, so that an energetic materiality overspills the prepared matter, a qualitative deformation or transformation overfills a form" (Deleuze 410). The authors liken metallurgy to music where there is a "continuous development of form" corresponding to a "continuous development of matter" (Deleuze 411). An energetic materiality, derived from the accidents of metal's combinations with other substances, gives it a force which varies the "intensive affects" possible for formal manipulation (Deleuze 408). In other words, variable matter dictates variable form.

The metalsmith must follow the material rather than impose form on matter. This operation is different from the modernist practice of allowing a material to be itself. Metal, in its infinite variability, actively effects the possibility of form and the resulting affects of form (light, dark, hard, soft, etceteras). Thus, there is a more fluid relationship between form and matter, artist and object, thought and material reality.

This moving matter or "matter-flow can only be followed" by an itinerant artisan (Deleuze 409). Not only does the metalsmith follow the flow of metal, bridging thought and reality, he also bridges radically different cultures.

The first and primary itinerant is the artisan. But artisans are neither hunters, farmers, nor animal raisers. Neither are they winnowers or potters, who only secondarily take up craft activity. Rather, artisans are those who follow the matter-flow as pure productivity; therefore in mineral form, and not in vegetable or animal form. They are not of the land, or of the soil, but of the subsoil. Because metal is the pure productivity of matter, those who follow metal are producers of objects par excellence. The metallurgist is the first specialized artisan, and in this respect forms a collective body (secret societies, guilds, journeymen's associations). Artisans-metallurgists are itinerants because they follow the matter-flow of the subsoil. Of course metallurgists have relations with "the others," those of the soil, land, and sky. (Deleuze 411-412).

Metalsmiths not only follow the flow of metal, they also itinerate between the straited spaces of the centralized agricultural empires, the smooth spaces of the decentralized nomadic animal raisers, and the forest spaces of hunters. They are the inventors of "holey space," where mines penetrate the subsoil randomly following mineral veins (Deleuze 415). "Mines are a source of flow, mixture, and escape with few equivalents in history. Even when they are well controlled by an empire, there is a major movement of clandestine exploration, and of miner's alliances either with nomad and barbarian incursions or peasant revolts" (Deleuze 412-413). Because the metalsmith creates weapons, jewelry, and monetary expressions he gives power, meaning, and value to each society but he also provides the means of revolt against any society. For Deleuze and Guattari a collective body or a specialized group, such as metalsmiths, supplies a check to centralizing power structures. As with metals, metalsmiths connect with everyone but their metallurgic secrets keep them free.

The objects metalsmiths produce also represent freedom and mobility. Although weapons may be used for enslavement, they just as easily become the instruments of liberation. Jewelry is a free form of expression unrelated to the political agendas of semiotic writing and visual narrative. Although it may represent expressively a culture, jewelry may transform into or pass into other societies with ease. The portability and luminosity of jewelry make it the most mobile of all art forms. Finally, monetary expressions, from coins to ingots, more than any other objects, represent a pure abstraction of value, which is universally negotiable in all societies because they serve no other purpose than pure circulation of goods. In this way, metallurgy has much in common with capitalism today. Money and the market circulate with the greatest fluidity across cultures and boundaries. They know no masters. Freedom of movement is their sole *raison d'être.* Weapons, jewelry, and monetary forms all share crosscultural affinities. They wander freely in the world.

Deleuze and Guattari recognize that metalsmith culture bridges many cultures while maintaining its own holey, cave-dwelling space. Yet, they associate nomadic culture most closely with true mobility, where no single place dominates and no destination terminates movement. Speed, flexibility, and the element of surprise make the great nomadic cultures, from the Mongols to the Huns, ideal "war machines" (Deleuze 420). War machines occupy smooth spaces, vast territories with no center, popping up unexpectedly and moving on. Possession is not the objective of the war machine. Pure movement is its aim. War machines always oppose the sedentary State apparatus. Even within the State, the military poses a threat to the stability of the monarchy or civil government. The State operates more through the police and prison system.

Metals have a special relation with the ideal war machine culture of the nomad or the barbarian. Weapons and jewelry are the primary art form of these mobile cultures. Built for speed, they arm and decorate the horses and men who flash across territories only to disappear in thin air. Weapons and jewelry implement the independence and the intense expression of constant mobility. Technology originates with nomadic metallurgy. Each progressive step in cultural development is initiated by the development of metals and weapons. The bronze battle-ax of the Hyksos or the iron sword of the Hittites mark the start of the Bronze Age and the Iron Age. "The fact remains that for weapons..., there is always a nomad on the horizon of a given *technological lineage"* (Deleuze 404). The nomad maintains his pure state of freedom and mobility only through his metallurgic innovations. Perpetual revolution requires perpetual technological revolution. Metals play a major role in this refusal to stand still and accept the status quo. Movement is freedom.

Deleuze and Guattari weave the arts of metalsmithing into complex relationships with multiple cultural groups, innovative technologies, and expressions of mobility. Their discussions of the material properties of metal, the formless designs of nomadic metalworks, the itinerancy of metalsmiths, and the connections between metallurgy and revolution for nomads place metalsmithing among the great philosophical discourses on freedom today.

Bibliography

Deleuze, Gilles and Guattari, Felix. *A Thousand Plateaus: Capitalism and Schizophrenia.* Minneapolis: University of Minnesota Press, 1987. Originally published in French in 1980.

Heidegger, Martin. "The Origin of the Work of Art." In *Poetry, Language, Thought,* pp. 17-87. Edited by Albert Hofstadter. New York: Harper & Row, 1975.

Kuspit, Donald. "Collage: The Organizing Principle of Art." In *New Subjectivism: Art in the 1980s,* pp. 503-520. New York: Don Capo Press, 1993.

Worringer, Wilhelm. "From *Abstraction and Empathy," Art in Theory, 1900 - 1990,* pp. 68-72. Edited by Charles Harrison and Paul Wood. Oxford: Blackwell Publishers, 1992.

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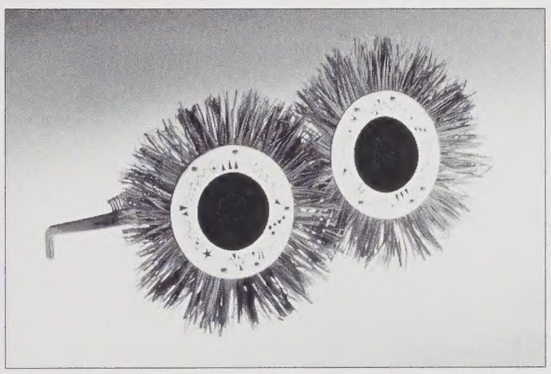

Tami Dean, "Zatchoo"
Bronze, sterling silver, copper, brass 14K gold, mirror, raffia, rubber

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Signals:

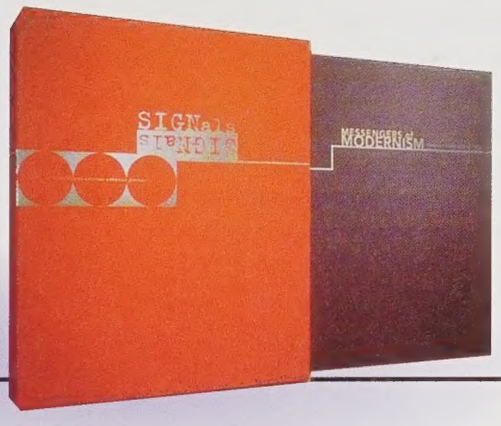
Late Twentieth-Century American Jewelry

Text by Margo Mensing

Above
Christina Y. Smith
Expensive Water, 1995
sterling silver

Right
Installation: Cranbrook Art Museum, 1996

***Signals: Late Twentieth-Century American Jewelry* opened at Cranbrook Art Museum in November 1996 – a contemporary counterpart to *Messengers in Modernism*, organized by the Montreal Museum of Decorative Arts from its permanent collection. *Signals* captures an historical moment as does *Messengers in Modernism*, but since it is the contemporary moment, there is no accumulated conjecture (a definition of history) to measure it.**



The works

Jewelry is a joint endeavor, the wearer is equal partner to the maker. An individual replaces a site as the place of display. The human body as the site of display can mean something different than the human body as a site for adornment. Display brings notice to the object, adornment brings notice to the wearer. In either case accessibility is primary and the visual can not be separated from the tactile.

To be accessible jewelry must be worn, but what are the conditions for wearability? Gary Griffin, curator of *Signals*, links it to meaning, meaning that the artist projects through the wearer's experience: "It exists outside the image of the work in the private territory where the wearer touches the work and the work touches the wearer.... It locates meaning at the particular site on the body of the wearer which is the only place where the total physicality of the work can be accessed."

Griffin connects the phenomenology of wearing from the maker to the recipient. This is the realm of words; phenomenology is, after all, language retentive. Hayden Carruth ends his litany of the profusion of a May garden: "I am the inelegant gardener soiling my hands in the humus of the alphabet."

How do we experience this private territory of touching? Through weight. When one goes to the museum, they go to look. When one goes to the store, they go to buy. Most likely they will make the decision by trying on a piece. This doesn't take into account that much jewelry is purchased by one person for another. When a man buys jewelry for a woman he might handle it, determining the real or approximate weight on the body, but he is unlikely to try it on. The two experiences can be quite different. The visual experience, the museum or the purchase of a gift for another structures the experience with no reference to tactility.

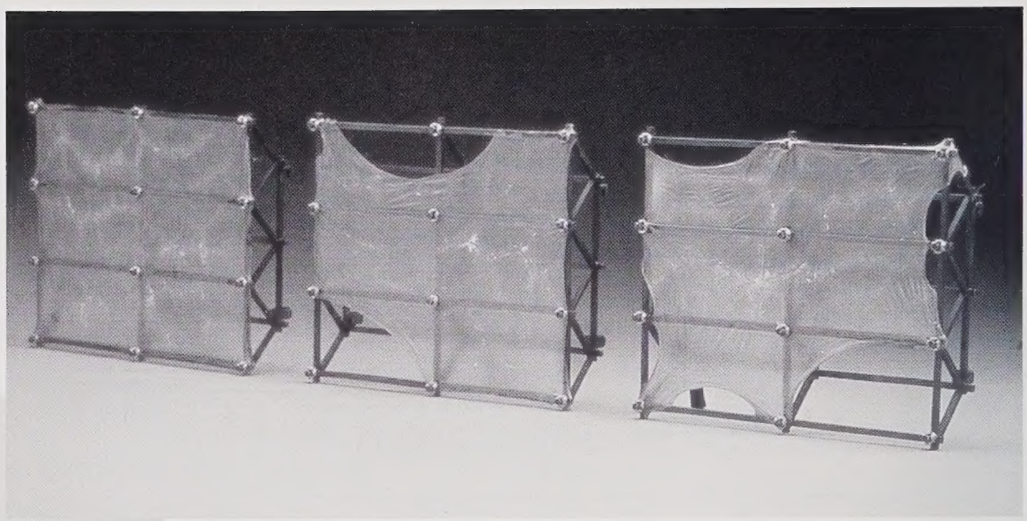
What I saw in the museum was altered significantly when, after the exhibition closed, I visited the vault and tried on pendants, brooches, and bracelets. Comfort is a desirable attribute of accessibility and comfort is related to weight. The perception and actuality of weight and the interplay between the two are both considered by the jeweler. In *Signals* much of the jewelry looked heavy, yet each piece was light in the hand and lay easily on the body.

In Milan Kundera's *The Unbearable Lightness of Being* the dilemma of the desirability of lightness is paired with the unbearable, suggesting that the attainment of lightness cannot be freed from the burden of weight. Periodically Kundera enters the novel to comment on the pleasure of lightness, but the characters' actions and the consequences of those actions demonstrate that the intricacies and entanglements of the personal and the public carry immense weight. The difference between the actual and the perceived is likewise posed in *Signals*. Almost all of the jewelry in *Signals* offers a dialogue between the object and the viewer. Made by the artist and carried by the wearer, the works comment on the human condition with repeated references to mortality.

The human figure dominates *Signals*. Whether it is the whole or a portion of the body, in piece after piece the body is a vessel registering mortality, sexuality, and everyday encounters. There is discomfort and oddity in the human gesture that stretches from the humorous to the grotesque, from the oversized burdens shouldered by Christina Smith's figures to the downright painful cannonball of Keith Lewis's *Triumphant Figure with Willow Wreath*.

In each of Christina Smith's three works, *Expensive Water*, *Martha's Vineyard*, and *Enfranchisement*, male figures are off kilter, one foot on a base and one foot falling off; they are barely balancing and hoisting awkward, oversized objects – a bucket or a saucer big enough to be a sombrero which holds a chunky bag of weighty cargo, coins, or jewels. The figure in *Martha's Vineyard* is bound by a parallelogram of rods that fasten over his torso. These featureless silhouettes are clothed in slightly bulking shirts and trousers differentiated at the beltline. They carry the imprimatur of the 1950s, the clothing suggesting both a uniform and week-end togs. In each instance the figure seems perfectly capable of juggling his odd appendages and yet equally about to be borne away by them. What appears heavy gains desirability because it is actually light.

Right
Joe Wood
Shades, 1996
sterling silver, gut, gold



Below
Susan Kingsley
Pine Pitch Pendant, 1996
copper and waxed linen

Signals is loaded with meaning. The phrase points to the ponderous, as if the jewelry suffers under the weight of its well meaning intentions. Sometimes this is true, but much of the jewelry conveys messages through light heartedness, a zestful balancing act, like Christina Smith's pins, that adroitly combines human comedy and tragedy.

Fifteen studio practitioners making jewelry today were chosen for *Signals*. Almost all the makers rely on images to convey meaning. They are messengers, not of post-modernism or any style or movement, but testifiers to concerns of the day. Their jewelry is made to be worn on the body but it also cites the body as the emblematic visage of the soul and psyche's inner fears and dreams. Sometimes the whole figure is retained, but often only a fragment is shown. And often the part of the body is one that is not visible. Dislocation and reframing are more than strategies, they highlight the text.

Julia Barello's three sterling silver *Vascular Studies* stand out in the installation because they are accorded different treatment than all the works in either exhibition. Barello's brooches are mounted over x-rays placed in maple frames, which make clear this is the museum's province and not the radiologist's. Three backlit boxes are placed on a wall perpendicular to the rest of the exhibition. The x-rays are more visible than the silver brooches. The effect is striking, but does the medical reference exist without the visual aid? What is more important the medical reference or the jewelry? Exquisitely rendered, the delicacy of the brooches suggests a dogwood in late winter as well as arteries branching into capillaries, though this is muted by the installation.

Sandra Enterline's brooches, *Bone Rooms*, are pierced boxes of oxidized sterling silver. The porous, mottled surfaces reveal tiny bones. Here the jewelry does all the work. Each is large enough to call attention to itself but small enough to be comfortable and unassuming.

Perhaps it is coincidental, but brooches are the type of jewelry repeatedly invoked to reference the body or a body part. The presentation of the brooch depends on the clothing of the wearer as well as the physical stature and personality of the individual wearing it. The choice of the clothing must be considered, as well as the fact that clothing is an interface between body and world, a layer of tissue that both disguises and ornaments. So too do brooches depend on clothing to heighten or lessen the experience of wearing. Concealment and revelation exist in three layers: brooch, clothing, person.

Daniel Jocz's brooches intimate a dialogue – a pear on a plate, the tips of fingers on a breast, lips overrun with tiny crosses. Lightness in this work is achieved through modeling and substantiated in materials: white gold, gold leaf, fine and sterling silver, luminous paint. Repoussé and chasing create shadows and modulated surfaces. Jocz chooses fragments which hint at a story. The rectangular shapes crop rather than frame the fragments, accentuating the immediacy of the gesture. Each vignette appears larger than the small space it is afforded. The lips, the pear, the breast and fingers manage to be both heavy and light. Milan Kundera, too, moves between lightness and weight to elucidate the unbearable weight, that goal of lightness that lies bare in human exchanges. Early in the novel Kundera states the difficulty in the opposition:

> But is heaviness truly deplorable and lightness splendid? The heaviest of burdens crushes us, we sink beneath it, it pins us to the ground. But in the love poetry of every age, the woman longs to be weighted down by the man's body. The heavier the burden, the closer our lives come to the earth, the more real and truthful they becomes.
>
> Conversely, the absolute absence of a burden causes man to be lighter than air, to soar into the heights, take leave of the earth and his earthly being, and become only half real, his movements as free as they are insignificant.

> What then shall we choose? Weight or lightness? Parmenides posed this very question in the sixth century before Christ. He saw the world divided into pairs of opposites: light/darkness, fineness/coarseness, warmth/cold, being/nonbeing. One half of the opposition he called positive (light, fineness, warmth, being), the other negative. We might find this division into positive and negative poles childishly simple except for one difficulty: which one is positive, weight or lightness?
>
> Parmenides responded: lightness is positive, weight negative. Was he correct or not? That is the question. The only certainty is: the lightness/weight opposition is the most mysterious, most ambiguous of all.

The human body serves not only as armature but as metaphor for much of the work in *Signals*. But other works reflect other imprints of human experience – observance of nature, exchange in the body politic, socially dictated mandates. Jan Yager's silver and gold chicory fragments do not follow the thematic thread of the body, but in materials, lightness, color, and craftsmanship they echo Daniel Jocz's works and so it is natural to address them here. While Jocz compresses the gesture within the geometric, Yager expands the actual through an accurate representation of a part of the plant – a chicory flower, a chicory leaf, a chicory stem in bud. Her choice of plants is significant. Puslane, plantain, dandelion, and chicory are the crop of the roadside and the vacant lot. Yager champions these so-called *weeds* because they are survivors; they are the plants that she sees in her daily urban trek from home to studio. Her presentation of them is *ordinary*, that is, the renditions accurately mirror the natural form. They are also extraordinary - Yager's handling of metal, her delicate balance of gold on silver, produce attenuated flowing lines. Like the glass botanical species in a natural history museum, the skill is in the craft and extends beyond it. Parts of the plant are outlined and detailed but the craft does not supersede the knowledge of the plant, the thing itself.

Keith Lewis's *Triumphant Figure with Willow Wreath (Self-Portrait)* also questions the opposition of weight and lightness. The gold wreathed cannonball figure of copper appears shackled, a burden. Tactile examination reveals lightness. Constructed of minute shavings held in a porous surface, an empty interior is suggested. The erratic bent guitar wire suspending the figure also signals the absence of weight. *Triumphant* in the title posits lightness over heaviness. Without picking up this necklace there is no way to know how heavy it is. It is, in fact, surprisingly light, almost buoyant when worn.

Death and life reckoned in the face of death is addressed by several artists in *Signals*, but Keith Lewis is the only one who focuses on and speaks out on AIDS and its link to homosexuality. *Our Dear Bob* and *Well Doug, It's 36 Now* hybridize human and animal forms, weapons and tools, scars and blood. The ironic titles and Lewis's statement testify to "the ambiguity of being a Queer man lost in Amerika [sic]. As virus and virulence buffet us, I navigate the slipstreams of heart, gonads, and conscious – making jewelry as vessels of memory, quiet calls-to-arms, and talismans of grief."

Lewis's language intentionally weighs down the work, an act which he would probably applaud, as he is of a generation of gays who believe that a silent community must share a measure of responsibility. In the beginning of *The Unbearable Lightness of Being* Kundera introduces the equation of lightness and weight, speaking neither for one or the another. Even if lightness is the desired condition, lightness is unbearable. It carries its own burdens; the truth of this unfolds in the lives of Tomas, Tereza, Sabina, and Franz. Actions undertaken which apparently produce freedom, a lightness in being, are burdensome and eventually lend weight and reduce freedom. Living for lightness, honoring seemingly enlightened decisions garners only temporary release; a burden descends with crippling weight.

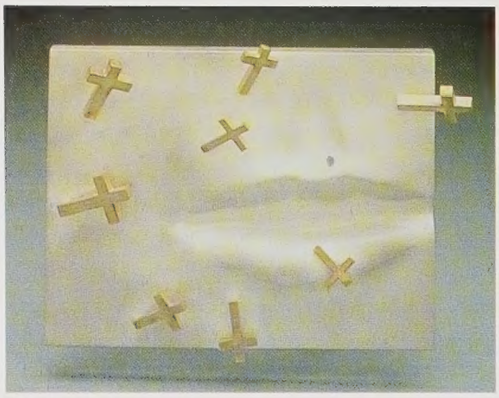
Lewis's language and images, a product of his being a gay man in America, graphically depict a burden. Not lightness, Kundera says later, but heaviness is valued.

Unlike Parmenides, Beethoven apparently viewed weight as something positive. Since the German word *schwer* means both *difficult* and *heavy,* Beethoven's "difficult resolution" may also be construed as a heavy or a weighty resolution. The weighty resolution is at one with the voice of Fate (*"Es muss sein!"* It must be); necessity, weight, and value are three concepts inextricably bound; only necessity is heavy, and only what is heavy has value.

But the antipodes are never clear. What is heavy appears light, and what is light appears heavy, as in the words of the song, "He ain't heavy, he's my brother." Though lightness is the tangible condition of this jewelry and this makes them desirable from the wearer's position, they retain visible weight for the viewer. The wearer, the activator of the work, will always be aware of the poles of weight, of the unbearable lightness. And one cannot wear the texts of Keith Lewis lightly.

Actual texts appear in the jewelry by Kate Wagle and Lisa Gralnick. Each artist is also struck by life's brevity. In *R.A.R.* the literal is the nursery rhyme "Ring around the Rosey," inscribed on the five bracelet rings intended to be worn as one. One red and four white painted roses are frozen in tiny lucite boxes that dangle from the rings, held together with tenuous fastenings. The kitsch rose pointedly registers as material as well as metaphoric opposition to the beautifully patterned surface of the pendant's case. Wagle's delicate pairing of images and fine craft make the rose as precious as the leaf-patterned case. "Kate Wagle, age 46" appears twice on inner surfaces, the surface worn next to the body. Apparent only to the wearer, the imprint of the artist marks the moment not by date but in the life of the maker. This gentle but startling incision is like memory's beacon in reminding us where we are in our lives. It serves also to remind us we make comparisons over and over – the recalled event to our age at that moment.

If Wagle recognizes the attempt to stabilize the fleeting, Lisa Gralnick in *Tomb for Thomas Bernhard* pinpoints the end of mortality. Gravity and death's release is entombed in the small text embedded in the locket. The quotation reads: "200 friends will come to a funeral and you must make a speech at the graveside." The number cites the magnitude of the dead's sphere of influence. Yet it is not necessarily the death of someone famous or powerful, but someone who was shown love and trust as evidenced by the use of the word friends. The wearer is you, and you take on the heft of the author's command transferred through the artist.



Left
Daniel Jocz
Nightingales, 1994
fine silver, sterling silver, 14k

Right, clockwise from upper left

Jan Yager
Chicory Blossom Brooch, 1996
Chicory Leaf Brooch, 1996
sterling silver, 18k gold

Kate Wagle
R.A.R., 1996
sterling silver, Lucite, paint

Erika Ayala Stefanutti
Coordinate Necklace: Gold Mine Sites, 1996
fine gold, photograph by Dirk Bakker

The texts are messages but not formulas or adages. They must be gleaned, sifted from the particles, just as the dirt, blood, and shredded $50 bill must be sprung from their cases and reassembled in the mind's eye. There is gravity, a dead weight, in the choices Gralnick makes. The money is not simple currency, it is named – *$50 bill.* That means more than shredded currency.

Plumbobs by definition must be weighty and the one in *In God We Trust* is equal to the task. The instrument and the body work off the same alignment to the earth as Gary Griffin points out: "A plumbob lets us know that which is erect and vertical. But a plumbob is also a pendulum and it lets us know when the earth moves. As jewelry, it acknowledges movement of the body suggesting dynamics of change."

Sandra Sherman does not cite chapter and verse, but text is alluded to through myth and story, overlaid with art historical allusions. *Venus and Cupid* takes into account the three-dimensionality of the body in an unusual way. The neckpiece is not simply frontal; it includes the viewer from an angle that the wearer does not see. Wings attach to the chain at the neck and fit the back, as wings properly do. Pushing the limits of ornament, the sheer size of the neckpieces makes them outrageous. The substantial silver wings and big chandelier crystals, watch hands, rose petals, and excessively long chains converge to create a *sterling* example of the best of dime store jewelry. Neither the construction nor the choice of what Sherman refers to as "mixed metaphors of image, material and composition" is overwrought. The rosettes of found materials are way stations along the length of the chain, and the spacing gives adequate time to travel from one point to the next. It would seem that these neckpieces would be a burden to wear. Yet they are feather light. Still, one must be willing to trade in the comedic and risk kitsch for one could not wear Sherman's jewelry without drawing attention.

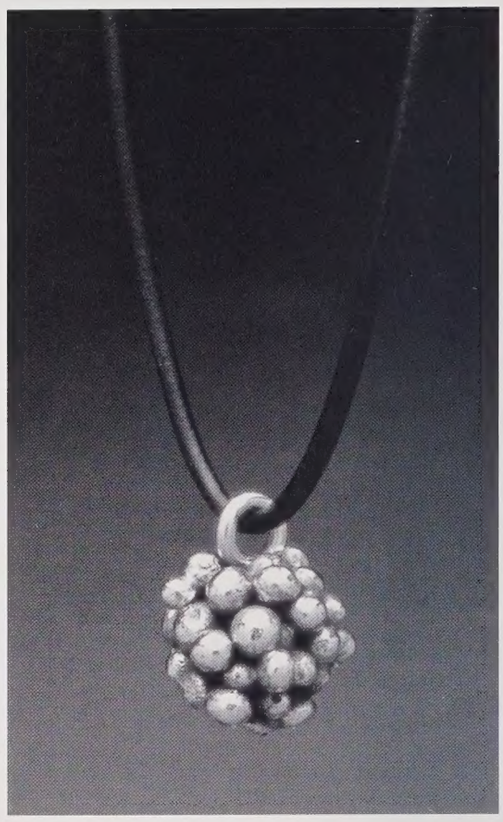
Very few jewelers in this exhibition step outside the bounds of metal. Gary Griffin chose not to include works with found objects in *Signals* because, for one reason, he wished to echo the materials primarily used by the modernists. Occasionally the thing itself, an alteration rather than a copy of a found object presents itself. This quotes *Messengers of Modernism*. There is Marianne Strengell's choker of hammered washers which calls to mind Anni Albers's humorous but graceful sink drainer neckpiece. Similarly Sandra Sherman's rose petals, watch hands, and chandelier crystals are barely recognizable for what they are, but when recognized they step forth as talismans of the everyday. The currency that Kathy Buszkiewicz uses is not transformed. Shredded and reshaped to create intricate patterns, she arranges the words to reiterate, for example, *reserve* not *reserve*. Currency is what we trade with but not what we trade in; the buck stops here. Money does not possess the social significance that objects possess. Money does not indicate what is valued.

Myra Mimlitsch Gray's four pendants are overscaled prong settings dangling from chains long enough to allow the pendants to cradle between a woman's breasts. Gray sends out zingers on the "actual and implied value of jewelry," as she phrases it. She is effective in her social critique in the several forms she chooses – hollowware, hybridized tools and flatware, as well as jewelry. Her measured economy collapses overstatement into understatement; she remakes the emblematic into an easily missed sign. While it is true that "strategies of formal exaggeration animate the work and enhance the cloying quality found in commercial gemstone jewelry," (her words) this grouping of pendants and chains zero in on the social rites of engagement and marriage which cuts through the entire spectrum of class and economic values. The implied weight of the base for the jewel has the attitude of a big class ring flopping from a chain, a sign of going steady.

In replacing the setting for the gem Gray refers to the aversion to gems that is apparent in *Messengers of Modernism* and she heightens the importance of the metalsmith/jeweler. Production jewelry may capitalize on human longing through its pervasive commercialization and therefore opens itself to ridicule. Yet it is somewhat faulty to stigmatize assembly line jewelry as uniquely commercial. The world of the studio jeweler, the elite craftsperson, is as commercial as that of the mass production jeweler. It just plays to a different market, maybe one a bit more savvy, one that likes being in on the barb and takes delight in flaunting the customs that, in fact, this wearer herself likely subscribes to.

Right
Jill Slosburg-Ackerman
Mass, 1995
14k white and yellow gold

Below right
Myra Mimlitsch Gray
Exaggerated 4 Prong, 1995
sterling silver



The ironic is very tricky territory in jewelry. Critique which targets material culture and the history of the field is besieged by the inability of the insider to ever completely shift to outsider. To wear jewelry is to subscribe to a particular social standing. It is never only ornament and display; jewelry signals status even if it is a statement of anti-status. To wear jewelry means that the wearer is willing to put on the attitude, aims, and production of another human being: the maker of the piece. Such is the case in the *Coordinate Necklaces* by Erika Ayala Stefanutti. Like Gray's work, these necklaces cleverly connect the significance of the material to the social construct which supports their making. Stefanutti strings together a series of numbers and degrees of latitude and longitude mapping the locations of metal mines. The metal of each necklace, gold, silver, or copper, corresponds to the metal that each mine produces. These necklaces though made of precious metals are not precious looking. In these chokers the letters are small, very flat and thin; they look like cookie cutouts. This *nothing special* attitude which is also evident in Gray's prong pendants has the virtue of making them wearable in most any instance. They are expensive, the price of the material demands this. The jeweler is caught in the web of her own irony. On one hand, location, the place on earth from whence cometh the material is a homage of sorts, but the metal and its resulting price also force the purchaser into complicity with mining, refining, and the distribution of the material itself. By relating the material to the site one is reminded of differing economies, one nation to another, and the wages of the miner to the wages of the purchaser.

Again the unbearable lightness of being enters. In *Signals* weight is not in objects but in intention. There is a reversal from *Messengers of Modernism*'s proposition that the body is the badge for the jewelry to the idea that the body is the badge for staging the message. The message of material – metal – is that its cultural significance be translated through its material value. Jewelry here is a willing carrier of meaning.

The exhibition

Only at Cranbrook Art Museum were the two exhibitions paired. *Messengers of Modernism*, from the permanent collection of the Montreal Museum of Decorative Arts, is traveling to nine museums, from Victoria, British Columbia to Padua. Signals is traveling to two different sites.

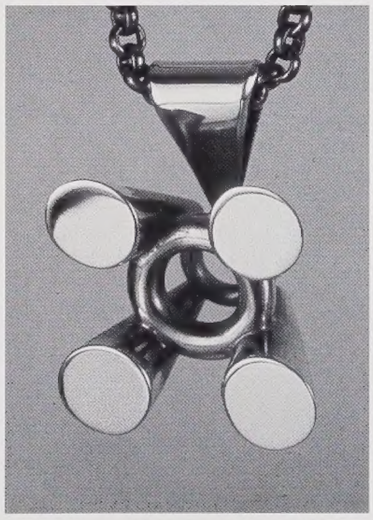
In a pair neither part can ever be completely separated from its partner. When two are coupled together, it's easy to take for granted the assumptions that go with linking two nouns. For example we know what we mean when we say *man* and *woman*. Language defines them. Though these terms fester with interchangeable qualities and carry centuries of rigidity that present-day society is attempting to undo, they still make a good example. All the subcurrents stand apart from biological differences.

Signals and *Messengers* present another pairing, and present a different problem. The words are similar; they both foretell or indicate; they are both nouns. But unlike *man* and *woman*, they describe forms of agency. Signals are things, set in motion by humans or natural events. Messengers are people (albeit sometimes heavenly incarnations) who carry information, which may or may not be signals. It is true that messengers may be other than human, turning leaves are a messenger or harbinger of autumn. However, given the two words together, we understand each word according to its most frequent usage. Side by side at the Cranbrook Art Museum, *Messengers of Modernism* and *Signals: Late Twentieth-Century American Jewelry*, signals and messengers seem inverted. It is not so much Henry Higgins' question "Why can't a woman be more like a man?" but more a confusion of cross-naming.

When the titles *Messengers of Modernism* and *Signals: Late Twentieth-Century American Jewelry* are coupled, the difference in meaning in signals and messengers is borne in the rhetoric but contradicted by the jewelry. In *Signals: Late Twentieth-Century American Jewelry*, the artists' intentions are demonstrated primarily through image, augmented in form and material. The artist and the intended recipient, where the message will be broadcast from, make *human agency* the first meaning of messenger, the appropriate one. On the other hand, *Messengers of Modernism* seems better suited to signals, indicators borne out through stylistic similarity to other aspects of modernism. The jewelry does not carry messages in the sense that *Signals* does where message depends on a metaphoric and/or narrative dimension.

That aside, the confluence of the two exhibitions side by side is striking. *Signals* energizes the modernist jewelry, making it exciting to a younger generation not cognizant of this genre of abstraction and modernism. In its perspicuity the installation invites parallels between the two. To look at the fine use of color in the works of Daniel Jocz and Jan Yager helps one see Earl Pardon's achievements in a new light. The modernist jewelers were certainly a varied group coalescing in regional centers. Many of them had other art beginnings and several careers. For a few, like Marianne Strengell, jewelry was a sideline. But they all respected the power of jewelry to magnify the minuscule into an assuming presence. Jewelry was as essential an art form as any other. In the catalogue for *Messengers of Modernism* Toni Greenbaum quotes Earl Pardon in his belief in the efficacy of jewelry: "In nature and its awesome wonderment I find this equally true – a growth of moss can be visually more significant than a forest; a singular stone can be more interesting than a mountain."

The installation at Cranbrook Art Museum was a visual knockout, enhancing the distinctions of each of the works in both exhibitions. Peter Stathis, Head of 3D Design at Cranbrook Academy of Art, working in conjunction with Griffin and Greg Wittkopf, Museum Director, transformed the spacious galleries, too spacious in their existing configuration for these works, bringing the size down to scale, giving the viewer the opportunity to focus properly on the "growth of moss."



When the two exhibitions opened in November, 1996 at the Cranbrook Museum of Art the installation, in fact, was equal partner to the works displayed. Unsheathed metal studs, rotated 90° from their usual alignment, were hung in close intervals. The resulting free floating steel curtain, suspended with turnbuckles, hovered between the ceiling and the floor. Narrow windows at regular intervals revealed the jewelry. Orange for *Signals*, violet for *Messengers* – light and signage separated one exhibition from the other but the repeating stud wall perfectly tied the two together.

The intimacy of jewelry requires diminishing space and the wall worked effectively to focus the viewer. If the sublime is an obstacle to intimate viewing, then its opposite, the ridiculous – the banal vitrine – was also considered. Vitrines were eliminated and supplanted with windows in the wall. This had the curious effect of shifting the museum space to the space of a store. In a subtle inversion, Stathis moved the viewer from the place of worship back to the street, from the place of the unattainable back to dream of ownership.

Jewelry is always about ownership and display. Many different attitudes about jewelry prevail today than the fifties' espousal of delight in the medium. Jewelry came in for heavy criticism in the years between the execution of these two bodies of works. In academic studio art programs there has been a corresponding shift away from jewelry to a more inclusive stance that brings back the forge. Many of the artists in *Signals*, like the modernists, maintain one foot in jewelry and the other in some other kind of making, or in teaching, or other careers. Still it is clear that they prize the construction of jewelry for its ability to speak large.

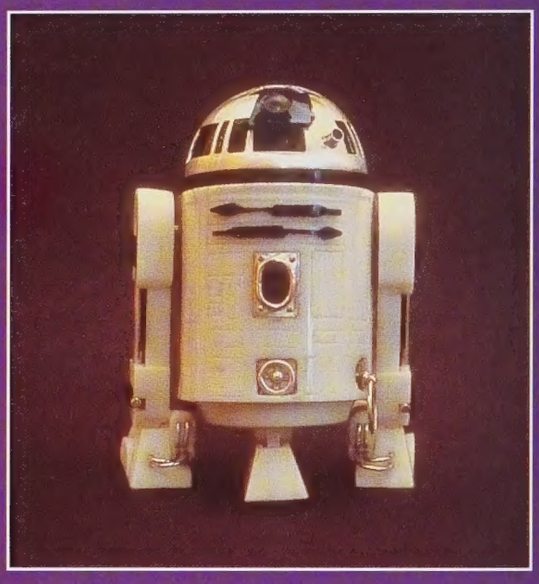
Toni Greenbaum begins her essay with a quote written in 1901 by W. Fred, "Modern Austrian Jewellery," in *Modern Design in Jewelry and Fans* (London: Studio):

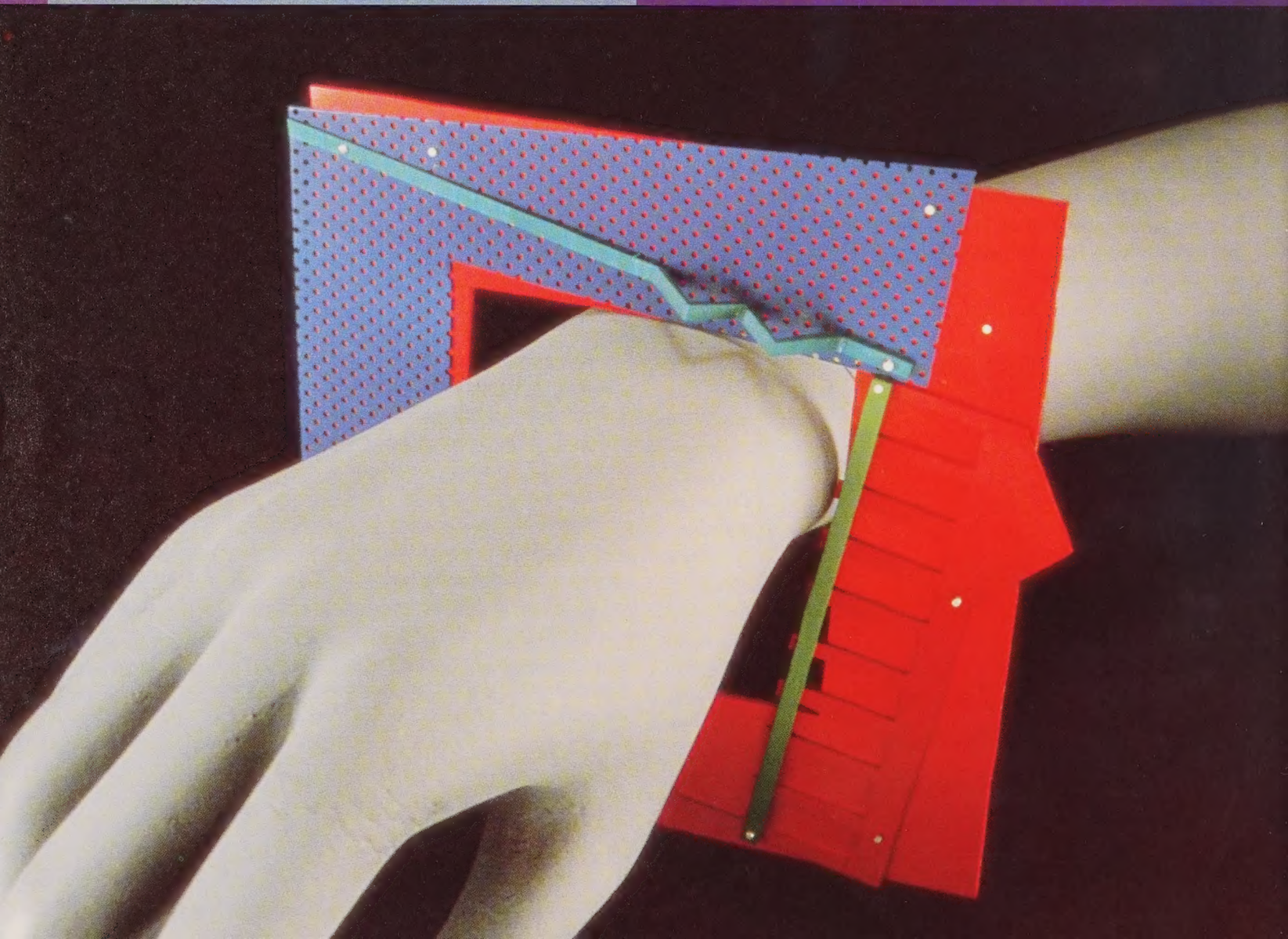
> Critical examination of the jewellery of any particular period cannot fail to be practically a chapter of the history of culture.... 'Every time has the jewellery it deserves'...for the ornaments worn, whether on the dress, the hair, or the person of the wearer, have always reflected in a marked degree the taste of their period, and are very distinctly differentiated from those of any other time, so that changes in fashion imply changes of a more radical description in popular feeling.

The phrase that stands out is "every time has the jewellery it deserves," the implication being that the historical moment is not simply recorded but that it directs the artist, or the artist is directed by it. If the moment is high-spirited, expansive, and seemingly placid – as it was in Vienna in 1901 and in the United States in 1950 – then the art will also be so.

Keith Jarrett speaking in 1997 in The New York Times Magazine puts a different twist on the adage that every age gets the art it deserves. He says, "There are some ages, I think, that don't deserve art as much as others. I almost think we live in a time now when that is true."

Margo Mensing is an artist and writer who teaches at Skidmore College.





Jewelry MEDIATING Jewelry

Text by Jamie Bennett

In 1970 Philip Guston exhibited paintings with estranged images of the Ku Klux Klan, old shoes, pink cities, and incongruous heads. This was a radical departure, a programmatic shift, from his first generation abstract expressionist work which was regarded as lyrical and *essentially* truthful. At the opening Wilhelm De Kooning mused, "why did everyone have such a problem with this work – accusing him of abandoning the movement, complaining about his making political art". De Kooning asked Guston if he knew what his real subject was; they answered together "freedom". "To be free, the artists' first duty," De Kooning declared, "that's the only possession an artist has and his only responsibility as an artist." But doubt of the works' integrity was the louder buzz in the room among those defending the legacy of painting in and for itself, an eternal manifest. The new work was seen as a digression, mindless sentiment, and emotional substance, not about the experience of painting, but about content and interpretation. To make things worse, outside the gallery were the revisionists, feminists, and Marxists spawned by the turmoil of the 1960s and determined to take a crack at this exclusionary ideal, challenging the genuineness and inclusiveness of modernism's brand of artistic freedom and its connection to culture at large.

Just a few years before 1970, Susan Sontag had written a warning for art titled *Against-Interpretation* and De Kooning himself had made it clear that content was a very small part of art. The consequences of modernism's ambiguous and troubled association with change, authority, and what the work was saying were being challenged and art was in a position of defense. What this event suggests is that the artist, object and viewer are all inevitably players in artistic production and participate with intent or by association in the works' larger social and historical significance and, can we say, *interpretation.*

As modernism has moved through the century we have both lived an idea of art as an experience unto itself and challenged that modern model. For the last generation we have been engaged in a semiotic clarification and exposition of shifting meaning and significance as the off center *center* of where we should be. This shift in what characterizes artistic activity and integrity is connected to shifts in the way we come to understand things and the very idea of the *cultural.* Although a bit simplistic we *have* moved the point of emphasis of art and art's moment from *experience,* to *meaning,* to *significance.* What remains however, and what I wish to discuss is how the function of jewelry can and should go beyond experience and beyond meaning and significance and toward effectiveness.

Clockwise, from upper left

Keith Lewis
Triumphant Figure With Willow Leaf, 1994

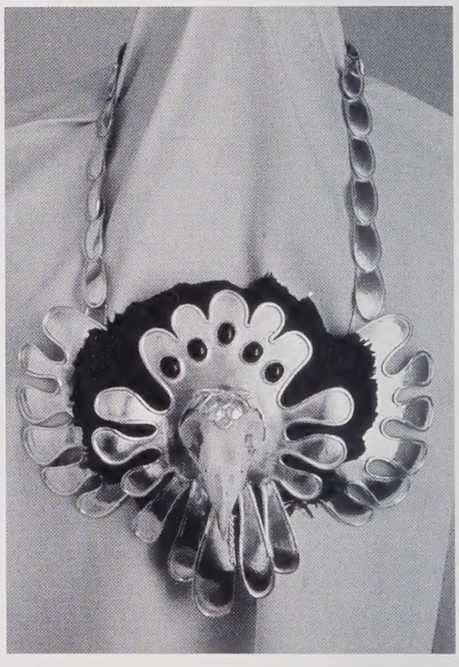
B. Walter
R2 D2 (Artoo Deetoo) Spy Camera, (Belt Buckle), early 1980s

Leslie Leupp
Bracelet # WG487, 1987
aluminum

When we look at the works of artist jewelers like Art Smith, Margaret De Patta, or Sam Kramer we see evidence of a time following the 1930s (the years in which these artists grew up) and its expectations of revolution and reform. The chaotic undoing resulting from the depression seeded a Marxist and socialist ideal which was gaining ground and offering hope, only to lead to consequences that were humanly questionable and emotionally frustrating. The disillusionment brought about by war and the internal conflicts of social responsibility made all values dubious for artists of the time. By the early 1940s frustration and despair gave way to a need for catharsis that found its voice in the models of abstract expressionism and surrealism. Abstraction reaffirmed the idea of a new humanism, which rose again with promises of a universal language in art, where art takes a natural place along side other human activities. For activist, poet André Breton Surrealism was a defiant practice that refused to submit to rational process; oppositional methods of making were adopted as a revolutionary strategy. Breton, living in New York by the late 1930s, was writing essays on various artists' work who were showing at the Julien Levy Gallery, where numerous Surrealist exhibitions were mounted, including the work of Man Ray and Miro. There is no doubt that many of the jewelers represented in *Messengers of Modernism* were kindred spirits of this generation of artists' and they were sympathetic to the styles and principles of abstraction and surrealism. But, by the mid forties another bred of jewelers and silversmiths were initiating programs at universities across the country. Their training and profession as designers or designer/craftsman in the English and Scandinavian functionalist tradition grew philosophically out of architectural principles rather than from studio art practice. A number of the jewelers in *Messengers*, such as Paul Lobel, Carlton Ball, and Harry Bertoia, crossed both paths. The overriding aspiration gleaned from this model was the idea of a progression to universality. As corrupt and traditional narratives and allegories were removed from the face of art jewelry, along with the useless and excessive vulgarity of ornamentation, what was left and consequently held shared meaning was form.

It is difficult for us to understand the consequences of wearing an Art Smith cuff or Merry Renk brooch in the 1940s or 50s. The wearers' participation and endorsement signaled that they were as much adventurers as the makers, continuing the romantic heritage of the avant-garde and spreading catalysts for change and advance.

Mona Trunkfield
Untitled, 1978
silver, feathers, bone



The surrealist subject was the psyche, the twisted truth of things, the id, where one could reach to express the intuitions of life through one's work. The jewelry object was purely a product of the experience of working, where everything else was excluded from art but the self and the solution of one's own engagement; to do this, it was believed, one reached and touched a social and political harmony through action and form. At the very least they were interrupting the corruption of the misguided value of bourgeoisie jewelry with its diamonds and precious jewels. The work they made bore little resemblance to the past, good or bad. It was a mark to the future and represented open-mindedness and adventure, as Toni Greenbaum has pointed out. To achieve this ideal, however, one had to turn inward, ritualizing the practice of making. Beyond the need for justification, form was the result of intuitive activity and a trust in the instinctively natural mark or the psychological cryptogram as an expression of a new *beginning* we all could reach through the experience of art.

It is difficult for us to understand the consequences of wearing an Art Smith cuff or Merry Renk brooch in the 1940s or '50s. The wearers' participation and endorsement signaled that they were as much adventurers as the makers, continuing the romantic heritage of the avant-garde and spreading catalysts for change and advance. That little, two inch brooch had weight and power in numbers; it reified itself in the unanimity of style and claimed the territory of humanist discourse. These were the aspirations for the works' effectiveness based on the hope that the work itself, as an embodiment of self sufficiency, would do something to instigate a better world.

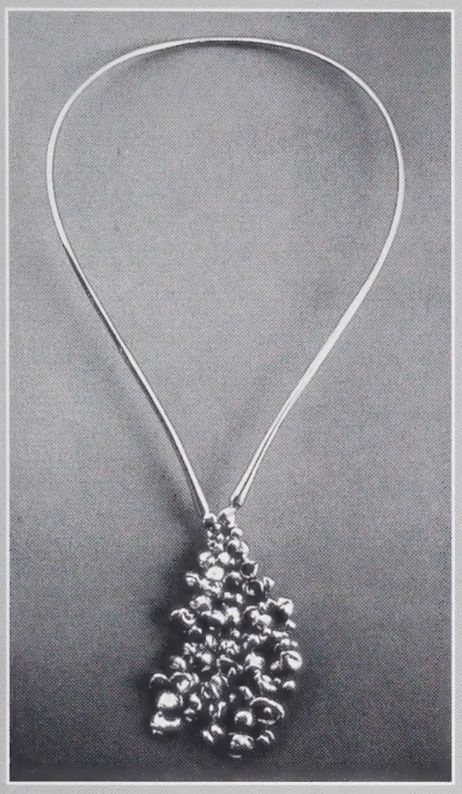
However, by the early 1960s this earnest undertaking collapsed. From jewelry to architecture the entire social basis of art was being transformed. No longer was art an act of advocacy or rebellion, despair or idealism on the fringe of society looking in with an uncorrupted light. Art and craft were being normalized as a professional act with professional societies springing up, craft fairs being established, and homogeneously modern, lifeless steel and glass buildings being piled up in cities throughout the US. Innovation, experimentation, and dissent were institutionalized and made official. While the style and mannerisms of post

war modernism continued, sense and meaning were missing. What we saw in the sixties was a political and economic crises in the west. The emergence of third world nations and the women's movement, increasing restrictions in socio-economic life, and ecological destruction all exposed the exclusionary and failing character of humanistic discourse. The impact of these changes should not be underestimated as they all became of interest to post structuralists, who would in the mid to late seventies expose the complicity of the modernist ideal with problems of social and cultural order.

From the stylistic quagmire of the late sixties and into the seventies, jewelry, like most of the arts, fell into the modern vortex, swirling around on itself, seeking definition, solving problems both of identity and simple making. The work of this period from the seventies to the early eighties, the teenage years of contemporary American jewelry, is awkward, brash, and often without direction, but mostly passionate and venturesome. It is also a vital historical link to where we are heading today, and the reasons for this direction.

Art jewelry of the seventies moved out of Greenwich Village and San Francisco to universities, art schools, and colleges across the US, part of the institutionalization mentioned earlier. There was, in fact, a disconnection from the jewelers in *Messengers of Modernism.*

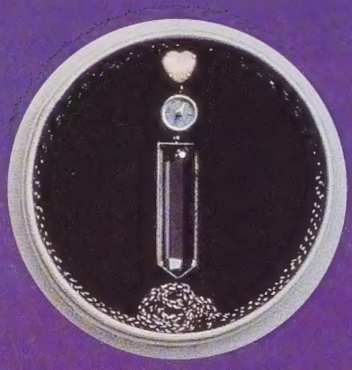
I recall going to Sam Kramer's store/gallery on West 8th Street. I convinced my mother to buy a pair of his cufflinks for my uncle. In my innocence and general enthusiasm I professed my taste for his work to my instructors and I brought one of my teachers glass eyeballs and cowry shells from a basket Kramer had in front of his jewelry counter. It was clearly indicated to me that Kramer and his kind were hacks and had little to do with the *tradition* of jewelry and goldsmithing or the future of the field. Whatever their individual motives, the practitioners of that brand of modern jewelry were clearly out of favor and replaced with a vision of jewelry that was less singularly stylized and restrictive, technically more resourceful, and reflective of the diversity, one might say disorder, of culture in the 1970s and early eighties. Ironically, the disregard for the kind of work seen in *Messengers* and our ignorance of it in the seventies undermined our ability to identify an immediate history from which to resourcefully react. (I should point out here that the formalist baton was picked up and modernist iconography and ideology continued through the design strategies of form following function, integrity of materials, and ideas of sobriety and anonymity. It is also apparent that the art jewelers of the forties to the early sixties had greater unanimity and philosophical continuity, most were headed in a single direction and had a sense of moral and social rightness.)

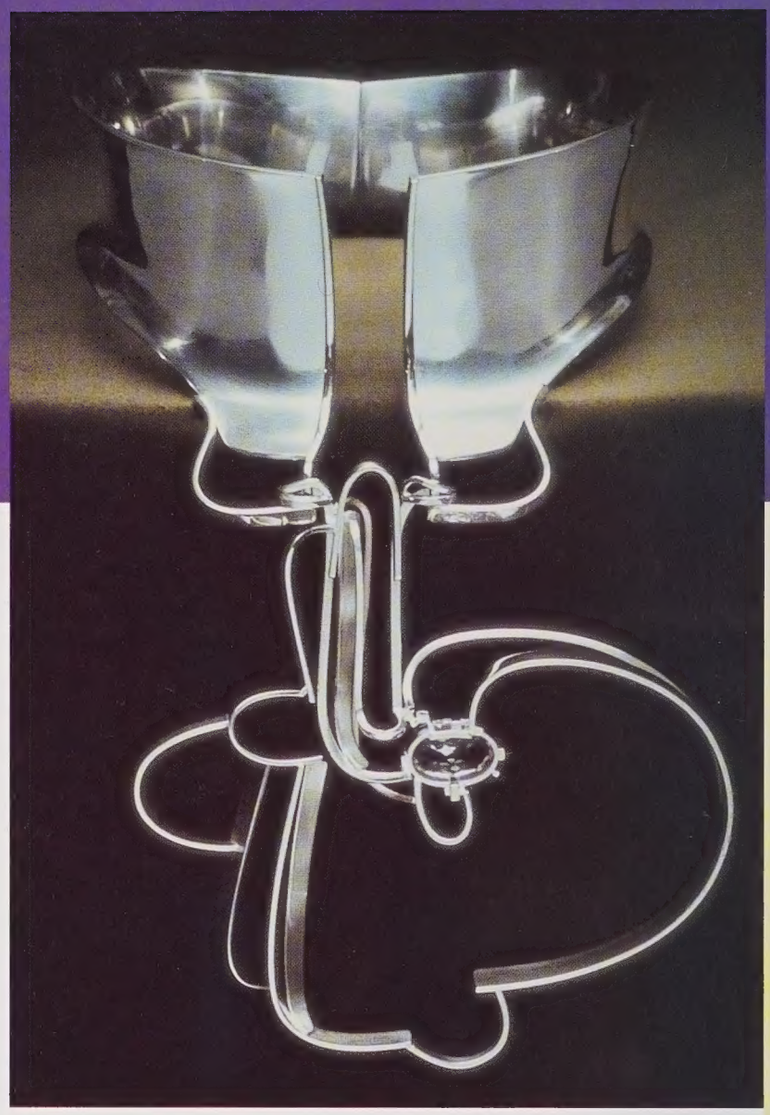


Ron Pearson
Pendant
14k

Jewelers of the seventies, such as Helen Shirk and Lee Peck, were far more flexible, seeking technical, emotive, and political ways to distinguish themselves from the past. Their work was anything but singularly directed; to call it pluralistic is a generous word, in that it suggests intentionally. The contribution of the jewelry of the seventies was not its effect on culture nor its ability to change the climate of things, but its ability to absorb and replenish the spectrum of things. Representations of individual habits, techniques, and processes, faithful and sometime absent formalism, and stylizations of pop and funk art all came into play. The political choice of non-precious materials by the jewelers of the fifties, for example, opened the door to the sentimentalizing of the materials of jewelry in the seventies. The idea of personal expression as a vehicle to reach a higher goal and to find a common thread among us, to have a social goal, was replaced by personal expression as a form of proclamation, self medication, and individual authority. The advent of the personal narrative in jewelry had a jump start in the seventies by way of the academic studio. The confusion and parochial nature of jewelry in the seventies was a result of a bombardment of signals coming in and a lack of any far reaching meaning or clear signals going out. Sense was often replaced by sentiment.

Part of the complexity of the jewelry of the seventies, and it continues today, is the unintentional crossing between the models and systems of design and those of art. Hybrids without the strengths of intention created a jewelry that had weak connections to the legacy of *Messengers* and equally shaky links to the functionalists' ideas of design and the historicists' preservation of goldsmithing. This all had to be shored up, and sorted out.

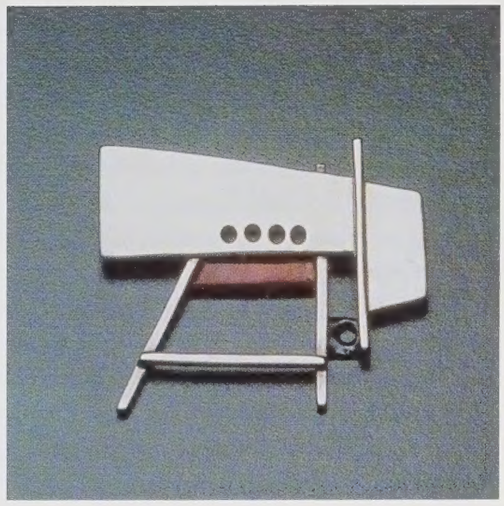




When jewelry entered academia the teachers became the models of the profession. They and their students looked to each other for examples and as a resource, initiating a cloistered, incubator-like world within which ideas, techniques, and a fundamental vocabulary would be exchanged, developed, and secured. A clear example is the orthodoxy of form, language, and shape determinants associated with Heikke Seppa's school: Washington University in St. Louis. Another example of the internalized eye was what metalsmith and chronicler, Lane Coulter characterized as "the attack of the wondering tendril," a jewelry device to be found everywhere in the early to mid seventies. For the most part, this influence can be traced to Art Nouveau, but the direct influence was Albert Paley's work, via Stanley Lechtzin. People were not so much looking outward as they were looking directly at themselves; nor were they looking to nature as a philosophical model. It was simply a matter of working where the action was. An exception to be noted is the work of Jem Freyaldenhoven, who found great power and frightful beauty in the duality of nature through this form. The eclecticism of this period in American jewelry reflected a search for meaning, but illustrated the frustration of too much unchallenged information, and a lack of tools necessary to engage the formal, conceptual, and stylistic activities of the time.

This is not to suggest that serious and influential work was not being done in the seventies. On the contrary, I would suggest that the work and habits and culture of the seventies have had greater impact on the appearance and resolution of jewelry and its propositions today than did the work and makers of the forties through sixties.

There is little question that the seventies and early eighties were an era of experimentation, technical development, and aesthetic naiveté in American jewelry. We were either proudly or uncomfortably self absorbed. By the mid seventies we were invested enough in academia that the challenges and questions of the fine arts were well into play as a stream of European jewelers, most of whom considered American work to be unintelligent, emotional, and jewelry that showed little regard for being jewelry, including Claus Bury and Wendy Ramshaw, had visited the US. While the nonsense of art and craft distracted us on one hand, few welcomed, on the other, the restraints European jewelry imposed on the creative alternatives associated with art and individual freedom. These challenges made us simultaneously more determined and more defensive. We ambitiously continued, while realizing we had to acquire an understanding of an American sensibility in jewelry. There were a number of problems, however. While the work often had social or political meanings, the object, whether a ring or necklace, was treated much like a sculpture's pedestal and seldom configured conceptually into the politics or point of the idea. We had not yet figured out



Left to right

Sandra Sherman
Means of Orientation,
(Neckpiece with Box)
Box: mixed media
7 x 1½"

Helen Shirk
Collar with Pendant
silver, morganite; forged, fabricated
10½ x 4¾ x 2½"

Frank Rebajes
Amoeba, (brooch) c. 1945-50
silver
3⅛ x 2½ x ⅝"

Mona Trunkfield
Untitled, 1978
silver, feathers, bone

our relationship with the object or the discipline. While protecting our own sovereignty as artists and makers we were not relating to the authority and property of the field. Perhaps we were not yet prepared to be aware of or understand jewelry's own voice. Before developing the capacity to become engaged by the enterprise in which we were working there first had to be a shift in our perception of jewelry.

It is impossible to discuss this inevitable shift without discussing the advent of Postmodernism and how it first characterized itself in American jewelry in the early to mid-eighties. The evidence of Postmodern thought in jewelry initially presented itself in two ways. First through the so-called *new jewelry*, which emphasized material and form exploration, particularly in ways that challenged ideas of value and taste. The new jewelry also explored the parameters of jewelry's relation to the body, questioning traditional locations and manners of wearing jewelry. While jewelry's relation to the body was considered and investigated, the questions were primarily formalist or historicist. The second characterizing quality of Postmodern activity was that it was simply a stylistic movement that had historical markers and borrowed from principles of architecture and design. First initiated by the architects Robert Venturi and Charles Moore, who were influenced by the writings of Jacques Derrida and Roland Barthes, postmodern buildings showed a wry mixture of romance and irony. They challenged the fixed and purist identity they felt was plaguing architecture. Their changes to the principles of the practice produced an image of Postmodernism which was immediately codified. Most important was the movement's return to historical models, which is most recognizable in the work of architect Michael Graves, who had a significant impact on many jewelers' style of working. The influence of Graves and the designers Ettore Sottsass and Phillipe Stark on jewelry was for the most part, short-lived and very quickly subverted by commercialization. The role and *trustablilty* of history was not brought to question in jewelry, it was simply being made officially available again. What is most obvious about these two activities and the changes in jewelry's direction is that they primarily represented a change in form. They did not produce nor clearly intend any perceivable change in the social function of jewelry nor did they challenge ideas of jewelry's behavior or significance. This was due in part to the Postmodern style's lack of coherent objectives.

What then has brought us to the present and to work that again seems to be as principled and confident, though certainly not as homogenous, as that of the *Messengers of Modernism*? Postmodernism's relationship to and critical dependence on modernism has characterized both the achievements of the work in *Signals* and the consequences of the earlier attainments of the work in *Messengers*. Development has occurred both through lineage and through individual leaps. As a modern commandment progression must inevitably find new modes of expression and in turn reject or plant over the old. *What has occurred* is the critical consideration of what works do, as well as what they say. The investigations of jew-

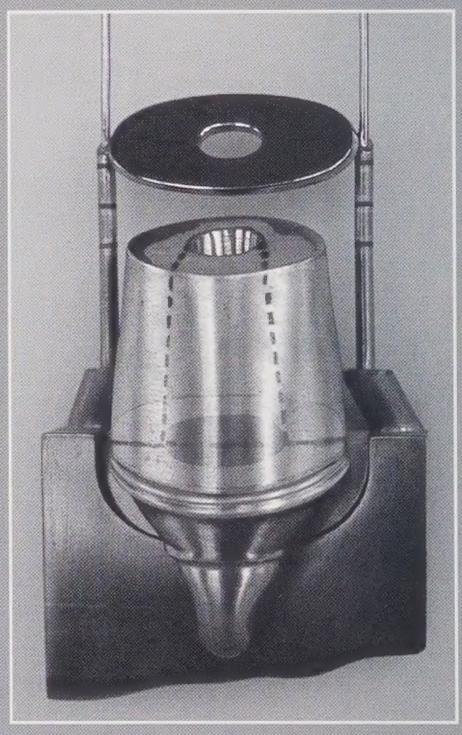
elry, when jewelry is considered an integral part of the social process, encourages the exploration of differences, exceptions, desires, and rules. The complicity between jewelry and social structures is being dismantled in order to recreate a jewelry which understands its operative qualities and is not derailed by either its own language, or its adoption of another (jewelry as *sculpture to wear*, for instance). The dynamics of jewelry have surfaced. How we determine the role and soundness of visual representational systems and the functions of our language will influence the effectiveness of our practice. Some jewelry from the mid eighties on has acted self referentially, as a critique of both the bad habits of Modernism as well as the historical inequities and erroneous favors of antiquity. We lost faith in the ideals of humanism and enlightenment, finding them to be corrupt in their authority and narrowly nationalistic. It became very easy to be cynical and self effacing. Western concepts of goodness and fairness provided us with a great deal of subordinates and exclusions in the order of things. Jewelry itself was, of course, in its appropriate place, in a well ordered if not dissenting hegemony of modern art activity, and it also maintained its unenviable role as a sign of wealth and power.

As we tried to rediscover jewelry's sociality an awareness of the forces which control and subordinate it had to first be scrutinized The moment between *Messengers* and *Signals* has appropriately provided these tools and a means of rethinking the function of jewelry. It would be impossible, in this short time, to provide adequate definition or a full analysis of the language of ideas that changed the face and momentum of jewelry. Clearly the opportunity for jewelers to see and evaluate what they make as jewelry emerged from a context of specific social interests. The use of theory and the energy of simple determination was harnessed to solve a practical project: what is the use of our jewelry? Among the fields mined for the tools of inquiry was literary criticism, which gave us theories of deconstruction as practiced by post structuralists such as Jacques Derrida and Paul de Man. Semiotics, the study of signs and sign systems as a means of establishing meaning, came from the field of linguistics. Feminist issues grew out of political science; phenomenology and discourse theory and Marxism was derived from philosophy; and psychoanalytic theory came from psychology. While the arts became a more complex practice, jewelry revitalized itself and defined itself as a field that was engaged in the idea of discursive techniques as a strategic means of making more meaningful and socially relevant jewelry.

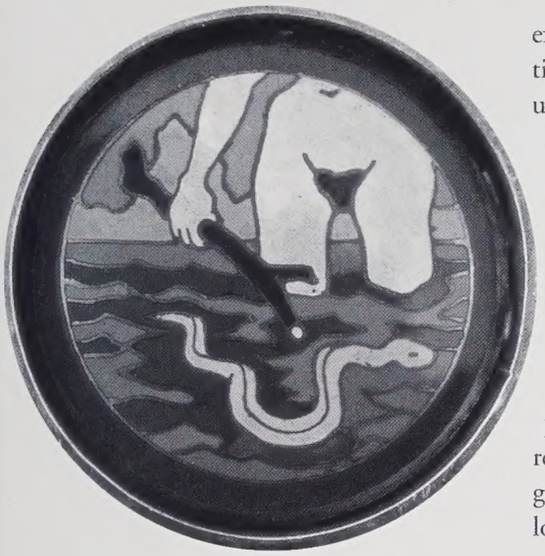
These various theories and their signals are not engaged merely as a matter of academic interest. They are employed because a more satisfying account of jewelry is at stake. They serve to enrich and restore the role of jewelry which, as we will see, is not singular.

The idea of art signaling or signifying something other than itself is not new; we can cite traditional allegory to prove that. We have long been immersed in the making of substitutes, where the signal or representation compensates for an absence. What Postmodernism has as a quality unto itself, not only in contrast to modern or pre-modern, is its emphasis on the viewer as a critical participant in the *making* of the work. In jewelry this idea is even more profound, in that the wearer is a direct and often determining participant in the work's success and intentionality. The piece of jewelry and in turn the wearer is forced into signifying. A momentum is produced which moves the work away from the site of style and iconography to an action, with the viewer in front of the piece of jewelry and the wearer behind it. These conditions of reception articulate the effectiveness of the work. A discursive activity, moving, changing, taking up time, rather that an act of frozen figuration, changes the idea of what jewelry can be.

Arguably, the women's movement has had more effect on where jewelry is today in America, than any other theory or phenomena. This movement redeemed ideas of *lived experience* and *the discourse of the body*. Even the change in language from the modern *figure* to the feminist *body* asserts this critical disjunction. In modern empiricism experience was relegated to the privilege of the private, the secluded moment of an epiphany; while for the feminist, one neither needs nor sees such distinctions between questions of the human subject and questions of political struggle. They are one and the same. What and where we are is a social condition, all to often configured by an idea of rightness and authority.



Claus Bury
Pendant, 1974
gold



Ken Corey
How to Wash Your Snake, (Buckle), 1977
enamel

One feminist strategy takes the form of a challenge; it does not invest in jewelry, it exposes jewelry. It does not engage in an exchange; it counter punches. It argues from its position of power and escalates the singularity of challenging. What feminism also offers is an understanding that the significance of jewelry is not that it is just for the body, but that it essentially confirms the human body. The point of such work is not simply to pronounce and generate a sign system as a directive or as a correction. That strategy only produces a simple *read* and is eventually insignificant in effect. Jewelry when worn is alive and telling; its form and subject act on us and with us. It participates in the meaning of both what a human act is and what we propose it is. It is not *there* in the sense of being figurative. It is a vibrating signal, a signal which enters into the squabble and if its objectives are well considered it can be an out of the way voice in the crowd of things. What we have learned from feminism is that jewelry, along with other discourses, acts as a signifying practice. It produces effect and it fabricates matters of consciousness and unconsciousness, sometimes reaffirming and at other times reversing existing systems of power. Thus, the coming and going of power can be influenced by the function of our practice. This connection is the ideological link between discourse and power.

It is unlikely that jewelry in and of itself can be transformative and make us better, any more than can Calvin's Obsession, or a Mike Kelly installation of stuffed rag dogs. We can not consider it in isolation from the determining social context, nor can we sequester the object from its action. In order for jewelry to effectively change our day there must be a genuineness in its essential relationship to people, and in its *graspablilty.*

The jewelry in *Signals* works at this in several ways, and not necessarily with a single objective or cause. A good deal of the work plays sentimentality off of irony, a showdown between reverence, desire, and sensuality, that is a psychological and political idea of *lack* which needs to be fulfilled. Yet, in reaching back to mythology or the mystification and recollection of nature and material, it provides no final meaning or meaninglessness. The work continues articulating and yearning, at times quoting and poeticizing from Victorian jewelry or gothic art; it pastiches modern and anti-modern, scientific and anthropological sources side by side. In reclaiming and reinvesting in the ideas of the traditional and the modern it declares simultaneously the bankruptcy of both. It undermines the value they hold together in providing more space for one to act. This argumentative current of romanticism provides a means to question; it is a tool used by these jewelers to intervene with stereotypical prototypes of jewelry's function. What we see here is not the repression or the sublimation of desire, but its realization. Images of flowers and buds, co-ordinates of gold, and arteries of silver stand in for both psychic and physical identities. The natural and the historical world are again connected to our experience and perception, and are part of the production and seduction of codes and signals. As we look at the signified, the context, the cause, or the philosophy, we must also look at what the piece on the body is doing, its material deployment and the social intervention being accomplished by its signified elements. Jewelry *can* alter the consciousness of the body through these associations.

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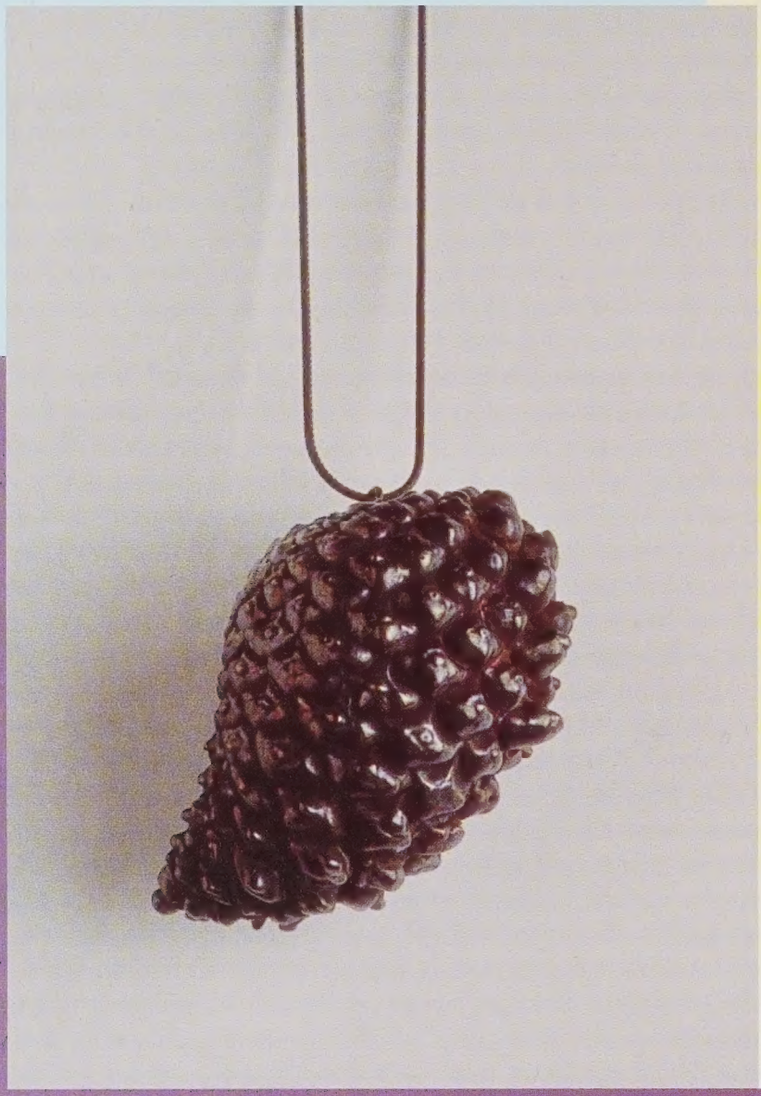
Some of the work in this exhibition *messes* with the cult of popular and official jewelry, romancing a *bad girl* interpretation of the concept of people who wear jewelry. It measures the influence of romanticism on taste and the efficacy of pseudo-gems on power and seduction. This wholesome commodification has its own way of flattering and then employing the wearer and viewer as participants in an act of corrupting jewelry *du jour*. The dignity of beauty is somehow misquoted and all of a sudden the original is unretrievable. We are stuck somewhere between honesty and dishonesty with an artificial masterpiece confirming, with a wink of an eye, the maker's and wearer's good taste. In such work the wearer's attitude creates the setting in which the jewel can expose itself as a rather attractive trick. Prospecting in this area is Myra Mimlitsch Gray.

The seriousness of challenging class systems, the crisis of cultural authority, and signs of power in Western European civilization are not always subjected to humor or satire. Some jewelry addresses such issues head on and uses jewelry as a carrier, a transport for issues and images of crisis. The subject matter is a means of destabilizing the authority of

Susan Kingsley
Untitled, (Pendant)
copper



Art Smith
Patina, (necklace) c. 1955
brass
11⅛ x 6⅛ x ¼"

jewelry itself, and whatever is in the way outside. This practice recognizes the tyranny and conspiracy of the participants and pursues and presses jewelry's complicity with power. While such wholesale condemnation may argue jewelers out of existence, it can expose a system of power that allows and encourages one type of jewelry or thought, while prohibiting, blocking, and dismissing others. In an attempt to dismantle signs of authority, however, what may be produced may well become just another law enacted by the user of the new field of discourse. What is possible, however, is an insistence on difference and a proclamation of the Other. This offers an extension of jewelry and acts as an instance of conceiving difference without polarization or absolute authority.

What we are beginning to see is jewelry as forms of activity inseparable from the wider social relations between makers, wearers, and bodies; objects, beholders, and bestowers. The work, then, holds reduced and inarticulate meanings outside of the social conventions and conditions which were considered in its making and produced in its wearing. As culture more and more signifies our practice, we make notice of what society needs. We move from recognizing the signification of actions to employing them as a tactic to produce change.

The strategies of such practices start from the choice of methods and theories which support our aims and those that contribute to our identification with the human condition. The concern for effectiveness embraces and shares the principles of formalism and semiotics, the devices of structure and significance. There are valuable concepts to be learned from various theories that help create an operative discursive practice. While our discourse presents itself as a form of power and desire, it more importantly offers the tools to move out of the modern vortex and to punch holes in the idea of the strategies' effectiveness of simply understanding and producing more signs. While signs have stable meanings, signals, in their gesture, do not necessarily know what they mean. They may have contradictory or multiple meanings and purposes. The sign is not substance; it is a marker of recognition. The activity of jewelry is not pure sign; it is a thing tied to a voice, to materiality, partly object, partly sign. The object of jewelry can be the sense making part, the evidence of the body veiled by signs, signals, reasoning, and metaphors. The success of meaning is dependent on our going beyond watching signs to using signs. For a signal to be a signal, its reception must suggest use and an interest in what is being conveyed. Meaning is then carried across the work and into the moments of everyday life.

What the jewelers in *Messengers of Modernism* began and the jewelers in *Signals* have retrieved is a concern with the nature and effectiveness of discourse and the virtue and eloquence of their objects: *Meaning and the rhetoric of meaning.* Rhetoric is neither as precise nor as politically charged as semiotics; but the production of meaning, how things look, the craft of making convincing work, work that is visually effective, and work that has an idea of beauty is apparent in both of these exhibitions. I am not advocating a dogma of style, but a pro-active attitude in making work in which the physical actuality does something to us. Rhetoric is not necessarily gratuitous nor insincere, nor is it simply a formal concern. It is the idiosyncratic attention to what the work looks like, the very skin of the work, its discernible existence as a phenomena. It is simply a tool that reinforces the virtues of visualization. We still make things and these exhibitions are a testament to the use and power of this marginal and outmoded activity. The uniqueness of making today is, however, tempered by the fact that we learn from everywhere. Such learning can be a virtue or a vice. It is a risky business that can make all of culture commonplace without commenting on any of it.

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Ours is an unorthodox voice in the complexity of art today. Art engages ideas of its extendibility by the user/viewer and is no longer seen as a solitary act, but seen instead as a set of changing acts, engaging the body of its participants. Jewelers are as close as anyone to that body. They can affect the direction it takes and the attitude it has. In our society the socialization of people is instigated by messages and signals; it moves forward when we care as much about what we have to do as what we have to say.

Jamie Bennett is an artist living in Stone Ridge, New York. He is head of the Metal department at SUNY, New Paltz.

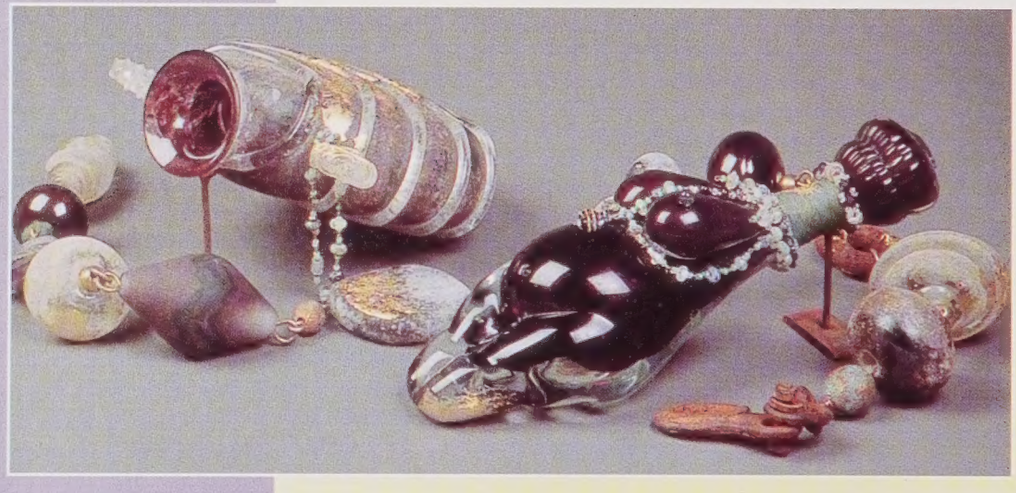
Jenny Pohlman & Sabrina Knowles

Text by Lisa Kinoshita

Heroic in scale, the prayer beads of Jenny Pohlman and Sabrina Knowles could be envisaged draping the bosom of an Olympian goddess or the wall of a downtown gallery with equal aplomb. Drawing from a primitive ground of inspiration, these artists combine the ancient arts of glass sculpting and metalsmithing to create "architectural adornment" that resonates with mythological, anthropological, and feminist themes.

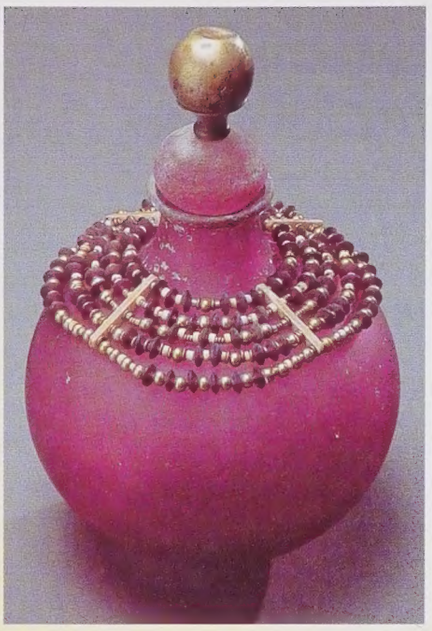
Above
Prayer Beads, 1996
off-hand glass, wound beads, blown vessel, sculpted figure, copper beads, 6 x 4 x 5"

Above right
Prayer Bead Series: The Promise of Spring, 1
off-hand sculpted and blown glass, brass, co
72 x 48 x 5"



Columbia Street Ruins, 1996
off-hand glass, steel, brass
24 x 12 x 6"

Archetypal icons such as the *Venus of Willendorf* are joined with prayer beads to create a cross-cultural devotional relic, magnified and abstracted into monumental jewels that elicit a visceral shock of recognition from the viewer. Yet, they are rich with submerged meanings as well. In the artists' cosmology the female is exalted not only as a "fertility figure" (a "safe, non- threatening label" in the context of the 20th century, according to Pohlman), but as the deep source of fecundity from which the spiritual and creative demiurges emerge into the physical world. The artists are also intrigued by the recent discovery in Kazakhstan of the remains of 6th to 4th century BCE women warriors, some of whom were buried with daggers and bronze-tipped arrows, one with legs bowed from horseback riding.



Pot with Lid,
1997
blown glass,
beads,
found objects
15 x 10"

A master glass sculptor, Knowles carves classical, sensual, female forms in molten glass. Suspended from Pohlman's 12' chain of exquisite prayer beads, her 21" Venus is a remarkable figure of amber radiance, plenitude, and shimmering power; her neck tightly coiled with copper, her belly a bowl of shifting light. This graven image slices instantly through politicized and denuded contemporary notions of sexual equality and returns one to the age when the cult of the goddess prevailed. Pohlman's off-hand sculpted beads, in natural colors of carnelian, quartz, and moonstone, echo the luminous helixes and shell spirals found in nature, creating a subtle rhythm on the strand. Their soft lustrous feel suggests that these relics have been worn smooth by centuries of mendicants, and the urgency of whispered prayers.

Knowle's and Pohlman's seamless collaborative work evokes the mystery of ancient civilizations and the dream of a common ancestor. Inside the belly of a translucent white Venus, her body misted with gold, nestles a copper scroll inscribed with a poem by Pohlman and sealed inside the figure while it was still glistening white-hot. The scroll might carry a message for the 21st century and the seeds of a new feminine mythology firmly rooted in the past.

Lisa Kinoshita is a
writer who lives
in Seattle, Washington.

James Metcalf of Santa Clara del Cobre

"Just what did I find in Santa Clara?
Why did I feel this mountain village surrounded
by pine forests was the culmination of ten
thousand things, and I no longer needed to move on?"
James Metcalf

Text by Roy Skodnick

Smith forging the large *cazo*, hammering from the inside as smiths did before they began using iron anvils.

In 1967 as word spread that an American had moved in to work with the coppersmiths of Santa Clara del Cobre, in the Plaza one day, a prosperous peasant on a horse towering above the gringo exclaimed in disbelief, "What! You've come to join the Smoky Smiths?" It was a legitimate question. James Metcalf's fellow artists asked it too, as well as his Paris and New York galleries.

Metcalf recalls, "Smoky doesn't give the idea of *Los Humados* as I found them. They were more like 'Smog the smith' soot faced, black from head to toe, sleeping next to their *cendradas* (the hot ashpit of their forges), washing but on Sunday before Mass. In those days a smith was considered a social pariah. They were barely holding on."

Among the other young sculptors (Niki de Saint -Phalle, Jean Tinguely, Claude and Francois Lalanne) working in the shadow of Brancusi at the Impasse Ronsin, Metcalf was recognized as "the American who knew everything about metal." By 1965, however, he was ready to heed Rilke's injunction "You must change your life!"

He explains, "In the middle sixties Paris was changing very quickly. Ever since Brancusi died in 1958, it was only a matter of time before his studio and ours clustered around his would be torn down. Twelve incredible years of making sculpture at a time and place where art seemed to make itself in the very cradle of modern art had come to an end. A new place had to be found.

"Through my friend Bill Copley I was close to the surrealists who were aging in Paris and who talked a great deal of the wonders of Mexico where native artists abound. The surrealists saw in Mexico the ultimate expression of their cultural inferiority.

"After a half-hearted try in my native New York, I found the cellar loft I rented in Soho too depressing. When the Mexican government offered me a large retrospective in Bellas Artes (the citadel of modern Mexican culture) and a trailer truck to transport the pieces, I jumped at the chance to leave for good. Melville wrote 'What one needs in life is a driving desire, some one to share it with and a place to do it.' Santa Clara fell into my lap."

Metcalf's last Paris exhibition at Gallerie J opened December 1, 1965, the day of Saint Eloi, the patron of smiths. Writing the catalogue essay "Phidias and Duchamp," he came across a critical passage in R. J. Forbes's history of metallurgy: "In primitive times all craft is sacred, and we find smith-gods among all peoples of Antiquity. Brahma as a blacksmith creates man and the Michoacans of Mexico believe that they were created from copper by a god of the forge."

In Mexico, he asked about the *Michoacans*. The Aztecs named the lake region to the West on the central plateau where their rivals, who came to be called *Tarascans* by the Spanish, possessed an advanced copper culture. In Nahuatl, *Michoacan* means "place of the owners of fish." Like the Triple Alliance, the Tarascans were a confederation of tribes, and they were never conquered in large part because of their copper tools and weapons. On the chance that something of this coppersmith culture survived, he asked where copper might still be worked and found his way to Santa Clara del Cobre, a small town twelve miles south of Lake Patzcauro. In New Spain, the town was known as *Santa Clara de los Cobres*. The plural "of the coppers" testifies to its extraordinary production. The Tarascan forge became the heart of the colonial smelting industry.

In Mexico City, Metcalf had inspected a double-handled kettle or cauldron: *el cazo de Don Vasco*, named for the first Spanish bishop of Michoacan who instituted its making. The *cazo* looked like the Spanish kettle he knew from the gypsy caves of the Sacre Monte in Grenada. It came in many sizes, and, at first, the unusual grain on the outside at first did not register. The one craft store in the capital offered other copper pieces too, pitchers and trays that were poorly designed and crudely executed. Nothing about these interested him. They were naive imitations of European styles.

Metcalf was told of a *bodega* in Santa Clara that sold copper, the only store where finished copper could be purchased. He found the proprietor closing *taros* on an iron stake from copper jobbed out to artisans. The stranger's questions were rudely dismissed. "Go find the

forges yourself. If you want to buy, come back." He walked across the street into a moribund forge and happened upon a few artisans bewailing the town's ill fortune. They seemed old with an air of desolation. Metcalf didn't introduce himself. He simply started talking. Felix Parra, who turned out to be exactly his own age, couldn't contain his excitement. "Come with me! You are just whom we need. This is perfect!" he exclaimed and took Metcalf out to see the working forges.

Severely depressed, Santa Clara was nevertheless a functioning community of independent forges, each a family unit that produced the *cazo* from start to finish with local materials. It's very survival was a great paradox.

"I found a group of artisans making a copper kettle being sold to the poorest social strata of Mexico. In Europe and the United States, wealthier people seem to get along with iron or aluminum substitutes. Yet the Santa Clara *cazo* is a necessary household item for a great many Mexican families. Culturally, this is very interesting. How is it that these peasants still prefer copper kettles? As poor as they are, they can still afford a copper kettle, more and more of a luxury everywhere else.

"This is what impressed me most when I first discovered Santa Clara. After thirty years, it is still the foundation of my interest in this community of artisans. The artisans of Santa Clara with an unimaginably primitive technique predating Homer and the Bible (where smiths forge on iron not stone) have been able to underbid modern industry for at least a section of the Mexican market.

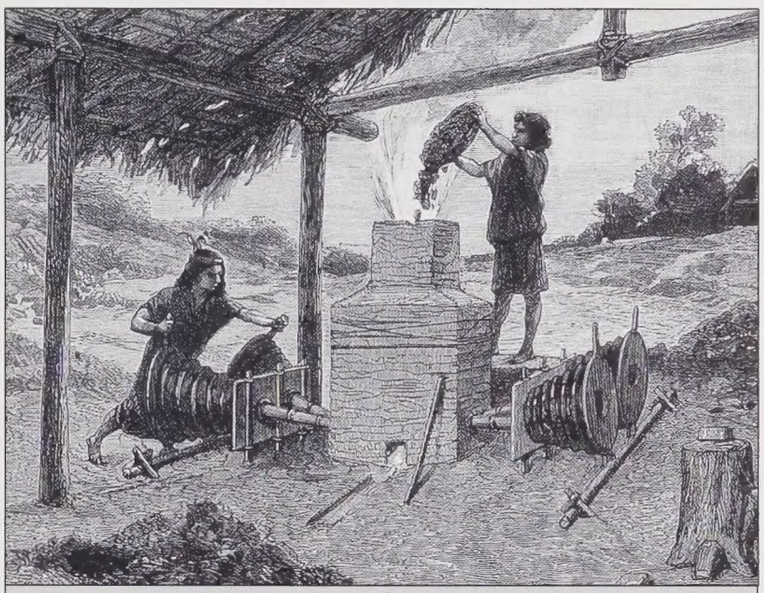
"If we believe Adam Smith and historical common sense, this should not be happening. Artisans lacking the wherewithal to exploit the technical advances of our age are meant to fall listlessly into the annals of industrial inefficiency. However, they survive by forging for their own needs by means of what has been bequeathed to them by an economy that produces material recycled at an ever faster pace.

"They melt scrap copper without crucibles or any other necessity for production that is not readily at hand with a bit of effort. Scrap by its very nature can be acquired in many ways, and even the artisans' tools, now becoming more and more sophisticated, are made from scrap. In Santa Clara husbands, wives, and children are all artisans! If this social reality can maintain itself by such primitive means, what would it be able to achieve with access to something more than the scrap of our universal culture?"

In Mexico City, Metcalf assumed the kettle was made from sheet hammered on an iron stake like the Spanish method. He was astonished to find descendants of Tarascan coppersmiths hammering their kettles from solid ingot. They were sinking or blocking: hammering down into the thick hunk of copper until it expanded like a piece of bubble gum, not on iron anvils but on stone quarried from the basalt skirt of an extinct volcano. They hammered the inside of the *cazo*. The grain of the stone was visible on the exterior.

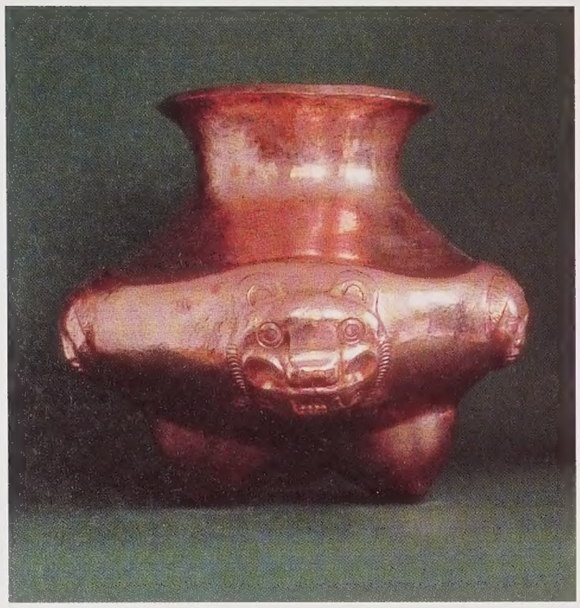
Some were just beginning to work with iron anvils to do smaller, decorative pieces, most smiths still couldn't afford them; instead, they hammered on scavenged tools: railroad tracks, truck axles, and grinding stones cut in two from *Trapiches* (sugar mills). Train couples "a type of universal tool" were their most prized "modern anvil." Otherwise, to forge what they call *puro cazo* the smiths used three stone anvils.

The first were large anvils which "you can sit right down on." The second, *yaparas*, were two smaller stones anchored into the ground at right angles. The third was a riveting anvil on which the kettle fit exactly. In the large anvils and the *yaparas*, Metcalf saw the Tarascan axe-forging method itself. The smelted ingot was cleaned balanced on the *yaparas*. On the large anvils (*piedras a extendar*), it was cut into workpieces (*tejos*). "Up to that point, they could just as easily have forged axes." Instead, the *tejos* were hammered into sheet. For large kettles (some measure three feet in diameter), the *tejo* was only cut in half. To produce medium sizes, the smiths hammered the *tejos* in a packet, the *mancuerna* of 3-8 *tejos*, and sank them all at once. The master turned it around the *yaparas*, as the smiths executed the *andarquari*, a word Metcalf realized was the Spanish verb *to walk* compounded with a Tarascan ending. They *walked* their long hammers (*candongas*) around the edge. He notes, "We know of no example of this particular phase of the Tarascan technique in any historical description of the past anywhere else in the world. This manner of making a kettle is a stone age solution to the problem. Until iron was used for anvils, it wasn't possible to make an anvil that would reach inside the object being forged." It was an adaptation of a stone age technology for forging axes to produce a laminated object. As Metcalf explains, the small anvil (*piedra a remachar*) was invented to rivet handles onto the *cazo*.



Engraving Metcalf found of American horizontal bellows in Charles Fremont's *History of the Bellows*; used in Peru with a Castilian furnace to smelt the iron blume.

The smiths were using a kind of bellows he had never seen before, horizontal with two accordion air chambers mounted on a wooden frame. The *tuyos* were often covered by an earth-work structure. Simultaneously pushed and pulled with both hands, it provided a strong, continuous draft. Agricola describes a variety of vertical bellows, but refers only once to a horizontal tin bellows in Portugal that



Left to right

A Colima style bowl with Indian motifs and classic three legged base.

Close up of vase, showing chiseled design, *gachos* and planishing.

Typical road-side display of cazos in various sizes.

Workshop where cazos spun hot on the lathe are planished, edged, and handles are riveted on.

he says did not work. In Fremont's *History of the Bellows*, Metcalf discovered a 19th century engraving of a similar bellows used with a Castilian furnace to smelt the iron blume in Peru. Certain that Tarascan smiths could not have smelted such large quantities of copper with blow pipes, he concluded this bellows was native to America. Later, he found references to its use by the Spanish who noted its greater efficiency.

The smiths did not use a crucible. They were melting scrap copper through a hearth of oak, pine, and charcoal into their *cendradas* reinforced at the bottom with stones. The master of the melt made a mold of oak ashes, purchased from women in the Plaza, and circled it with basalt stones. On top, he built the hearth. Metcalf was looking at the first reduction fire of human history.

The smiths were using copper wire stripped from electrical generators or old *cazos*, but Metcalf had no doubt this method had been used for centuries to smelt native copper and oxide ores gathered below the central plateau in *tierra caliente* (hot country) along the Balsas River. The Tarascans brought the ore to the dense forests and volcanic rock of the high sierra. The perfect stone for anvils, basalt was hard enough to endure the shock of hammering but porous enough to withstand the fire's heat. They distinguished *fire* stones from anvils. The smiths *dressed the stone* with other stone tools just as one would grind a *metate*. Metcalf never expected to see a survival of a prehistoric copper forge anywhere, least of all in the Americas where the conquistadors so devastated tribal cultures.

The smiths were able to hammer the thick copper anywhere they pleased. To be so fascinated by this, perhaps one needs to have studied the classical art of the European metalsmith. At the Central School of Arts and Crafts in London, Metcalf apprenticed to one of the last great smiths of Europe, Francis Adam, who drew his attention to "spoon block" and showed him how thickness was hammered artfully into the heel of a spoon. He remarked it as a vestige of a much older type of metalsmithing before the advent of rolling mills in the 18th century. Metcalf experimented with thicker blocks of metal but found it almost impossible to thicken the edge of a finished piece appreciably. Fifteen years later, he walked into a town forging copper with a method that preserves thickness as a matter of course. The Santa Clara smiths, however, were squandering their formal strength by rolling the edge of the kettle over an iron wire. Metcalf observes, "Brought up in a pure artisanal tradition, I was shocked. They would beat the *cazo* out of a block and then do this recent thing of rolling the edge over a wire. It was historically ridiculous!"

The contradiction was his way in: "To change the traditional wired edge to a luxurious thick border was quite difficult. Rolling the edge of all vases and kettles over an iron wire was the lone tradition of the smiths. I even heard that before iron wire was used, they rolled the thinned edge over a copper wire. I have no idea how this industrial expedient for the production of cheap tinned iron ware should have found its way into the craft tradition of Santa Clara del Cobre. Their objects were substantially cheapened by its use. If they were unable to change this practice, not only would their work lack dignity, but they would never be able to work successfully in silver. It took almost twenty years for the wired edge to disappear from almost all their objects. At first only three or four smiths were able to learn how to keep the heavy border. Even they, if they had a mishap, would thin out the edge and roll it as they had been doing before I arrived."

Metcalf discovered that "artisans are notoriously conservative about changes in design or technique. Although it may take place in a classroom, formal teaching of art and the techniques of plastic expression are essentially the instruction of individuals. Any development of the craft tradition of a community of artisans, it goes without saying, must be acquired collectively. The grafting of different technical and creative attitudes of working onto a homogenous guild of skillful artisans has very little to do with academic instruction.

"The immediate response of the artisans is to reject anything that is foreign to the way they and their ancestors have worked. One discovers very quickly that those ideas and techniques that appeal directly to their innate opportunism have the best chance of general acceptance. Fundamental to the successful development of Santa Clara over the last three decades has been the principle that they should never fall so low as to work from someone

else's design. They understood that a designer must have a profound familiarity with the material and technique for which he designs, and they have learned to design other ways of working copper that would have made little sense to them before I taught them. Because of their tradition of not accepting others designs, they have developed a distinct style of their own even working with outside influence."

At the end of his Paris career, Metcalf was doing figurative sculpture hammered from brass sheet, a departure from his abstract work. In "Phidias and Duchamp" he reflected on how sculpture first liberated itself from the awkward frontality of stone to achieve the plasticity of flesh with hammered metal in the Greek forge. "Suddenly they could see volume from inside, the thing they couldn't do in stone." He discovered a core form, the hyperbolic parabola, to model the surfaces and volume of the body: "all those subtle passages from one round form to another are nothing more than the smallest surface that will include both forms. These rounded valleys that make up the human figure, that are so difficult to produce in a mass of clay, were first mathematically defined by the 18th century topologist Leonhard Euler when he showed that all minimal surfaces must be saddleshaped."

The smiths of Santa Clara were astonished to meet someone who understood their technique. Parra asked Metcalf if he was coming back. "Next year after I close my studios in Paris and New York" the sculptor replied. "We'll all be dead by then," the smith answered ruefully. Metcalf did return almost to the day, and Parra wasted no time. "Now we'll have to get moving!"

Metcalf arrived with an arsenal of tools and equipment. "My used white Chevy pickup carried a large assortment of all types of metal working tools including thirty assorted hammers, stakes, and anvils; two large French annealing torches; even an impressive English wheeling and rolling machine; and electroforming equipment, tanks and a rectifier. The artisans had never seen anything like it. They were most impressed by the stakes in which one can see his reflection. Felix found me a one room house that I made into a studio. I set up my tools, built a forge and began to work.

"This was what I had done in Majorca where I worked with Robert Graves and in Paris. Promptly I forged the first copper vase in Santa Clara with a thick edge instead of a wired one. I filled it with pitch and formed six large grains of corn with repoussé, very much in the style of pre-Columbian Colima pottery. I thought that making pieces would demonstrate to them the possibilities of their basic technique and that this was the best way to stimulate the development of their craft. One morning Felix came to my house and said, 'Don Jaime, how do you expect to help us if you work alone all day? Come and work in our shop, so we can see how you do it.' That's when the artisans of Santa Clara introduced me to the possibility of participating in a creative social reality that I thought had disappeared in the twelfth century."

The forging method Metcalf taught them became known as the tradition of The Thick Edge (*El Borde Grueso*). Hammering down into the *tejo*, the smiths distribute the mass of copper from middle to edge and form a ring that rises to control the shape of the piece. "Once you have that combination, the rest can be thinned and blossom out. The piece becomes very light. The core is the ring and the edge." Metcalf forged several examples with a voluptuous thick edge and "pushed them towards using the paradox of a thin sheet, this hypothetical thing of two dimensions," so they would play with the transition "like doing a musical scale. This controlling combination is the thing a good silversmith tries for. But you have to pound and pound to get a luxurious thick edge. You can't do this in stone. Copper can move with the fluidity of clay, with an incredible play of dimensions. Ceramics doesn't have the freedom to be as thin." The secret is always leaving in reserves of copper and "never getting to the end too soon."

Bishop Quiroga established Indian communities based on Thomas More's *Utopia* and strictly forbade decorative objects. Nevertheless he preserved Tarascan crafts in Michoacan. If the forging of the *cazo* destroyed the aesthetics of Tarascan copper, it saved this Calcolithic technique by hiding it in a European kettle. The smiths had no idea of a beautiful object. Nor were they aware their technique contained the dynamic of *El Borde Grueso*. No Mesoamerican culture of the late Classic period hollowed metal, so

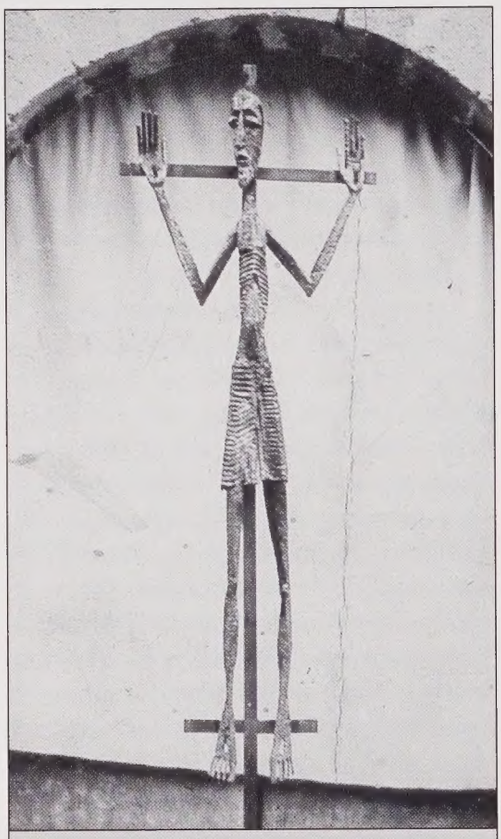
Metcalf looked elsewhere. Sir Arthur Evans first recognized Greek vases were imitations of gold and silver objects that had disappeared into the melting pot. Metcalf chose pottery from Colima to reverse the process. The smiths and he studied books and visited museums, but he didn't exclude other traditions either. Styles from Celtic and Mediterranean metal also entered the hybrid tradition of Santa Clara. He has introduced other ancient and modern techniques since.

"They had the domination of metal but no design. All of a sudden I liberated them from centuries of ignorance. The minute I gave them polished tools, they ran away with it. There were an infinite number of possibilities. They had a technique. Then not long before I came, they were beginning to get used to iron anvils collectively. I brought them concepts developed since Greece in metalworking. Before, they just sat and hammered. They had the patience to make the *tejo* bloom." When he showed them slides of ancient metalwork, they asked where work like this was done. "There are other people who do this?" They thought they were the only smiths in the world who forged copper. This work was thousands of years old, he told them but he exulted in the fact that it seemed contemporary to them. It became a challenge for their pride to equal, and they knew no fear.

They had never seen polished hammers before he demonstrated his balanced European hammers and taught them to grind and polish them. They thought he had put mirrors or silver in them. Theirs were large, clumsy blocks. The sculptor lent out all his tools. Soon the blacksmith made copies for the whole town. Metcalf distinguishes individual learning from the collective learning he set in motion. "The thing begins to whirl. I'd teach one of them something, and it would go around like wild fire. Eventually somebody would come back and try to teach it to me! They expressed their excitement in learning by teaching someone else!"

A direct sculptor who discovers the work of art in the material, Metcalf belongs to the tradition of Brancusi, Epstein, Gaudier-Breska, Modigliani, Gill, De Creeft and David Smith. He recognizes the Santa Clara technique as a superb example of this creative process "shared by all artisans and some artists." It was not design in the abstract sense he taught. "That's an idea you can buy. I don't do design. Design is just a cheap patent, the worst part of Bauhaus, folded paper. That's not where creativity lies. You can do that kind of thing forever and never engage the material actively which is the basis of creation."

The 1968 games in Mexico City were the perfect opportunity to make his work public in a town with a copper forge as old as the Greeks at the time of the ancient Olympics. Metcalf obtained the commission for the smiths of Santa Clara to produce a "cultural" torch for the entrance of the National Museum of Anthropology in Chapultepec. To give them a sense of scale, he showed them a picture of the Krater Vix, the largest forged object of the Gallo-Roman world. They chose a large Colima bowl as the model for *El Pebetero Olympico*. On the surface of two huge bowls riveted together, to symbolize ancient Mesoamerican agriculture, the smiths hammered corn kernels in repoussé over pine pitch for support so it wouldn't break. Metcalf recalls, "Felix suggested, 'Let's put in pitch.' He was always taken with a new technique. I had done the model over pitch. When they got a wild idea, I let them go. They poured in immense quantities." The event was an occasion of joy. It was the largest melt ever done: some 400 pounds were melted to forge two enormous *tejos*. Metcalf made *tuyos* of refractory cement. Clay would have melted in the fire.



Iron Crucifixion by James Metcalf, an early piece from his days in Majorca.

The Santa Clara forge truly rekindled the Olympic fire. The smiths dragged the ingot with tongs from the fire to the large stone anvil and arduously split it. The heat is so great the hands of the master who holds the chisel must be protected. Once split into *tejos*, annealed and dragged from the fire again, as many as eight smiths in a ring hammer it. Captains of the right and left choose where to thin the copper by their strokes. Hammers whirl back and forth, rise and fall in a perilous wave. A smith's pride is not to stop until the master turning the *tejo* says so. Their kinetic dance of hammers fascinates visitors to the town when they demonstrate the *extendar* at the annual copper fair in August. It is rarer to see the *cazo* forged completely in the traditional technique today. The melt is still done in every shop that makes pieces with *El Borde Grueso*. This is done by the so-called "elite smiths." Most other smiths now spin and finish smaller *cazos*. Only a few still forge the larger *cazos* and produce them from start to finish from melted ingots.

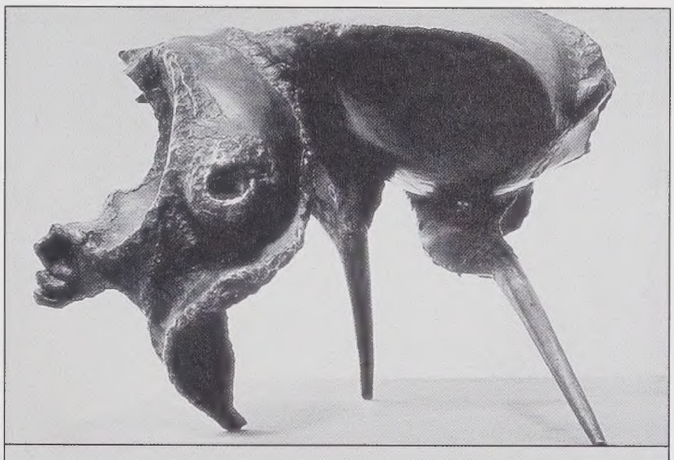
Stone is now replaced by iron, and two iron slabs are wedged into the ground at right angles over the stones to function as *yaparas*. The horizontal bellows has been replaced by modern ventilators to provide a more powerful draft with less exertion. Yet many of the "elite smiths" committed to preserving the traditional forge still use it. Rolling mills, mechanical hammers, and spinning lathes have changed and expanded *cazo* production dramatically. Industrial production stems from Metcalf's decision to learn how to use the lathe to solve difficult production problems. From his machine shop and working with the blacksmith, he still provides a stream of new tools.

Silver pieces forged by Santa Clara smiths have long enjoyed fame and patronage around the world since Metcalf introduced silver in 1972. He pounded out

a crucible, melted silver and gave it to his students. Then he took them to the Taxco Silver Fair where Etelberto Ramirez won the first *Galardon* to the consternation of the Taxco smiths who pointed out that Santa Clara pieces often wobbled. It was true. To help them center their pieces, Metcalf designed a pointing machine that allows them to measure symmetry as they work. Today it is used by all the "elite smiths." Just like copper, the silver pieces are hammered hot, and they ring.

In the few shops where the *cazo* is forged in the ancient method, copper scrap is carefully prepared. All impurities of tin and lead are clipped off. The hearth is carefully constructed in the same place, as it is every week. The master begins to feed copper into the fire. The pace quickens as more and more is added. After he completes the melt, he breaks down the hearth and covers the burning ingot with charcoal, to let it cool slowly unexposed to oxygen. Hours later, it is dragged still burning hot, like a round pie, from the hole and struck a massive blow to see if the melt was sound. Then it is split into *tejos* on a flat iron anvil. Each *tejo* is cleaned, balanced on the *yaperas*. Instead of hammering by hand, each shop today avails itself of one of the mechanical hammers. In the only shop where the largest *cazo* is still made, sinking is done by a trip hammer one by one. Here too the *yaperas* are preserved to guide the smiths who turn the piece. In other shops, *tejos* are stacked together into the *mancuerna* and blocked on the *yaparas*. A mixture of *cisco* (ashes and clay) is placed between them so they don't stick together. As they deepen, the smiths ease them down with their *candongas* (the plural of a *donkey in heat*). The *embra* (female) at the bottom is wrapped around the others. The *macho* (male) on top bears the hammer blows directly, as the copper is sunk. The *cazos* are then chiseled apart, and each one is finished separately. The bottom inside is given its edge by another hammer called a *yorcho*. The top edge is clipped straight, hammered around a wire, and the handles are riveted on.

In one shop, the handles are still forged on stone. Recently Metcalf asked Maestro Gilberto Hernandez, the oldest smith still working, to show him the mark of the stone. His son beat him to the punch, pointing with pride. "There it is!" Metcalf observes, "For certain things it is better. It grabs the copper in the tooth that iron doesn't have and they feel it. The copper doesn't cool as fast as it does on iron." Oxide accumulated from annealing is cleaned off the finished *cazo* with sulfuric acid. Each *cazo* used to be filled with burning straw and flipped over onto horse manure. Finally each one is carefully planished. The work cycle lasts the week. Today, smaller *cazos* are spun hot on spinning lathes from sheet produced by one of the local rolling mills, using a tool Metcalf made that presses the copper around a wooden form. The spun *cazos* are then jobbed out to other shops where they are edged and planished, and handles are riveted on. The *cazo* industry of Santa Clara is more productive than ever. The *cazo* has become an aesthetic object too. To exhibit their virtuosity at the copper fair, smiths forge ceremonial examples of the Spanish form that preserved their forging method.



Piece of welded iron and hammered brass, an example of Metcalf's early work in Paris.

In his first years Metcalf was alone with the smiths in idyllic isolation, and the town was completely ignored by outsiders, hard to imagine today when government administrators and private individuals take such active, and often acquisitive, interest. When he taught them *El Borde Grueso*, the smiths considered Metcalf not only a rain-maker but a magician, almost a Prometheus. Once he guessed the weight of a piece by figuring the specific gravity of copper quickly in his head. He hit it right on the nose, confounding them. They stood when their benefactor entered a room on public occasions. At fiestas, they raised their glasses to him.

Using their copper, he was absolutely reliant on them. He entered production completely, joining the *faena* (the collective work crew) at the beginning of the week when they rode across the valley in an ox cart to fetch new anvils and fire stones at the quarry, a narrow hidden cul-de-sac only seventy five yards long called "the corner of the kitchen". On Sundays, thinking he was looking for buried treasure, the smiths followed Metcalf around, as he investigated the ancient terrain of the copper forges under the volcano. Chavez Garcia, leading a band of renegades from Pancho Villa's army, burned the town in 1918. Alvaro Obregon had stopped their victorious march to Mexico City at the Battle of Celaya, and soldiers turned bandits ravaged Michoacan. Before that, the Indian smiths lived in their own villages under the forest canopy. When the town was abandoned by the owners of the smelting works that had employed Indian labor for centuries, the smiths took their stone anvils and bellows to set up shops in the great colonial piazzas with carved stone lintels and beautiful wooden doors. In the wide valley, where Tarascan *yacatas* (temples) are buried, Metcalf found old ingots and tools and great slag heaps. Peasants told him how they unearthed enormous quantities of axes plowing their fields and sold them to the smiths for the smelting fires.

While triggering this forging revolution, the sculptor took on as his student a young woman from Mexico City. Ana Pellicer made the *tejo* the basis of her early work. "As an artist" she says, "I am the individual reflection of Santa Clara." She eventually became a powerful teacher and politician too. Heirs to the vision of Mexico's revolutionary generation of artists and intellectuals, Metcalf and Pellicer are unique in the cultural specificity of

their work. From the roots of an archaic tradition, they have created sculpture and cultural institutions within a singular historical event: the renaissance of a Mexican pueblo.

To institutionalize the town's extraordinary growth, they founded *La Casa del Artesano*, the first educational institution in Mexico with a faculty of artisans. Looking back, it is hard to recall that *El Borde Grueso* was not established all at once. Pellicer explains, "The merchants used to pay the smiths more for the wired edge, because it used less copper. We had to fight for it. It was our banner!" They founded a museum to preserve recent history. Younger smiths continue to learn from it. In contrast to the town Metcalf found, today Santa Clara boasts ten times as many smiths who are young, proud, and confident of their tradition.

Metcalf and Pellicer established their own shop and taught the technique to peasants outside the traditional forges. Winning the confidence of these new smiths, Pellicer executed a huge work *La Machina Enamorada* (The Machine in Love) that celebrates different types of industrial production. The melt of six hundred pounds produced three *tejos*. A huge green sea of molten copper, it was about the largest possible in the Santa Clara forge. In 1976, Metcalf and Pellicer founded a school to initiate women into the labor force, first teaching the wives of the smiths who had collaborated with her. The sexual division of labor was a difficult boundary to cross. Working on the lathe, Metcalf produced tools and matrices for the women, and Pellicer taught them to not only make their tribal jewelry but work from around the world. Fascinated by the fact that the women would still only wear their own jewelry, as they mastered techniques that allowed them to create a variety of styles, she did an artist's homage to this pioneering generation. *Jewelry for the Statue of Liberty,* five pieces in repoussé hammered to scale (28 times life size), were hung in the World Trade Center for the Centenary celebration of the Statue. A great American icon became a Native American woman.

In 1991, the Mexican Government completely re-built the institution that today is the town's principal vehicle of growth. On land donated by Metcalf and Pellicer, the Adolfo Best Maugard School of Arts and Crafts is equal to any in the variety of metal techniques it teaches. Metcalf has fulfilled his vision of creating "a Limoges in the new world" where he has found "the most rewarding manner in which to live in this extensive community of artisans." He explains, however, that "a mono-culture of forging copper is not enough to engender the diversity of crafts the community needs to maintain itself against the onslaught of capitalism. Teaching in the apprentice system is the fundamental essence of the artisanal mode of production, but it is disastrous to think it is enough to pass on only the accomplishment of one tradition." The new school has its own museum, a superb library with an emphasis on the history of metal work, a lecture room with

Silver vase in the Colima style.

a capacity for 30 students equipped with modern multi-media (slides, CD-ROMs, and satellite programs from Mexican Education, essential for demonstrating the technique of creative drawing with Autocad), a language laboratory for English as a second language (for students from tribal communities, a third language), and a computer laboratory where applications of "this most contemporary tool" are taught with emphasis on creative computer aided designs to decorate works in copper and silver. The shops include a well-equipped machine-tool shop, jewelry studio (with most students today predominantly women), a dark room for photographically decorating copper and silver, a stained glass studio, the blacksmith's forge, spaces for traditional European copper and silversmithing (the second most popular shop), a foundry that casts pieces both in sand and lost wax, a spinning shop that has developed innovative practices, and a sheet metal shop. Placed significantly at the center of the school is a pavilion for the traditional copper forge similar to the shops Metcalf found 30 years ago. There is also a pavilion "of our own construction" for making and decorating miniature copper objects.

In the traditional forge, the elite smiths and their students are stretching the technical possibilities of *El Borde Grueso* with Metcalf, curling the thick edge as the Greeks did and chiseling the mass of copper to make the vessel even more sculptural. Electroplating, used primarily with flatware before, today stimulates design of thick edge pieces. Metcalf is absorbed in creating new occupations for the ever growing population of young artisans. The new American immigration law makes this imperative even more pressing. The school has an exchange program for students from Indian communities from Chiapas and Oaxaca who concentrate in blacksmithing. They learn to forge agricultural implements from scrap steel. Metcalf's latest plan is to smelt charcoal iron as fine and malleable as the renowned charcoal iron of Norway and begin artistic production in iron. Ore is available in Michoacan and fine charcoal is now produced at the school with wood harvested from the reforested mountain nearby. In Santa Clara, the demographic explosion has produced "a sea of young artisans." In a recent essay "News From Somewhere," Metcalf defines the town as "a reserve, a sanctuary of technical diversity in the craft of metallurgical production, ancient as well as contemporary, a live museum and archive of a kind of history that can only exist as a living reality with living artisans. The artisans and apprentices of Santa Clara have long possessed the capacity to satisfy all requirements for work in metal, exploiting its reality for their own well being. They function as a dynamic community and continually develop new tools and skills to further their creativity."

Roy Skodnick has worked with James Metcalf and Ana Pellicer since 1987 and is currently completing their biographies. His article on Metcalf and Robert Graves appeared in Gravesiana *(Vol. 1, No. 2, Dec. 1996). His translation of* Artisans of the Future/Santa Clara del Cobre *by Jorge Pellicer is available in Santa Clara at Galeria Tiamuri (Pino Suarez No. 110) or directly from him, 175-20 Wexford Terrace, 4M, Jamaica, New York 11432. [$24 plus $4.00 for postage and packaging]*

Vase with *gachos* (slices of an orange) a core piece in the Santa Clara Thick Edge tradition, based on Colima ceramics.

Megan Lewis
Queen's Tools for Creativity, 1996
sterling, copper, wood,
found objects
Photograph by Ling-Yen Jones

Dimensions of the Mind: Jewelry and Metals

Abramson Gallery, Mendocino Art Center
Mendocino, California
December 2 – 27, 1996

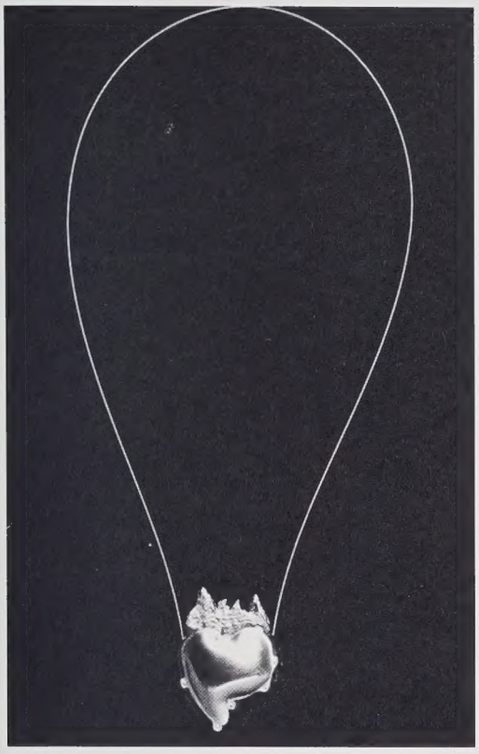
By Susan Wood-Onstad

To step into the Mendocino Art Center's A.D. Abramson Gallery is to step into another dimension. The gallery is small, well lit, and quiet, so that as I enter this space I have a sense that, amidst the work of these six metalsmiths, I have crossed into the dimensions of the mind. These emerging artists, Ling Yen Jones, Leilani Norman, Megan Lewis, Susan Neel, Mia Semingson, and Eric Trabert, all current or former students of David LaPlantz, share a common language. Using the vocabulary of base and noble metals, precious and semiprecious stones, and found objects they are able to cross the dimensional barrier between imagination and reality, translating their inner imagery into a concrete object or piece of jewelry.

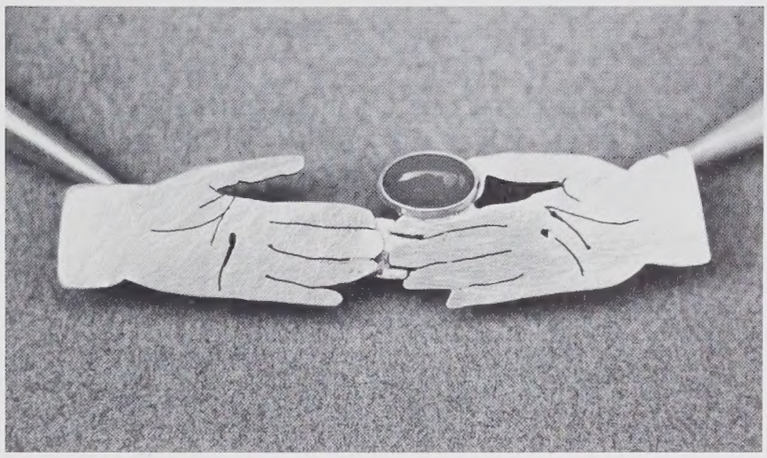
Ling Yen Jones, curator of the show, did a remarkable job of choosing artists whose work complemented and supported each other. The pieces presented are a varied yet harmonious body of work. Her ability to organize, however, does not outshine the objects she contributed to the show. Her works' primary objective is to adorn and flatter the body, and that objective is well met. She uses semiprecious stones, beads, and hand-woven chains to highlight the decorative elements of her necklaces: the clasps, which serve as the focal point of her necklaces. These decorative elements, designs which include birds and hands, are universally understood and accepted symbols, and therefore easily accessible to the general population. But camouflaged behind these images is a profoundly personal language which speaks of friendship, family, relationships, and responsibilities.

The dual nature of the shield, to defend and to contain, appears to be a strong element throughout Leilani Norman's work. Norman's three neckpieces, *Pendant with Hand Made Chain #1, #2,* and *#3* are intriguing. All three have a rounded triangular shape, are slightly domed, and have a pierced opening on the surface through which one can glimpse the interior of the pieces. *Pendant #2*'s surface of oxidized sterling has an etched linear pattern and is embellished with three citrines. The stones echo the orange patina of the interior, revealed through the pierced opening. Norman best translates meaning and emotion into form through her wearable objects. *Call of the Ova* is a copper chain mail girdle. Across the front of the girdle is a sterling silver heart shaped form, riveted to an acrylic rim, and crowned with 14k gold flames. But the heart is sagging and deflated. The tension created by this imagery was dispelled the moment I looked at the back of the piece, for there on the reverse side, behind an acrylic window, the heart contained a sterling silver fish swimming among pearls.

Megan Lewis's skill is evident in her beautifully executed *Fork and Spoon, Thimble and Spool,* a fork and spoon set whose cool, sleek, linear handles are whimsically topped by a fabricated sterling thimble and spool of thread. It is, however, the naive quality of her narrative jewelry that enables Lewis to beautifully translate her inner spirit into material form. She uses sterling silver, copper, wood, and found objects in her pendant, *The Queens Tools for Creativity,* to illustrate the tools which, as an artist, she feels are the most important. The necklace is a simple hand made copper chain interspersed with blue buttons. Hanging from this chain are three small wooden houses, or shrines. Within each is a single image etched in silver, a heart, a hand, and a crown. Each symbol is mounted on a blue and yellow painted aluminum background. The heart, hand, and head are valuable tools indeed, but the overall childlike quality of the piece



Leilani Norman
Burning Love, (Necklace), 1996
fine silver, gold, nickel, acrylic, rubber,
fresh water pearls, found objects
Photograph by Brandi Easter



Ling-Yen Jones
Hand to Hand, (Necklace/Pendant), 1996
sterling, chrysoprase
Photograph by Ling-Yen Jones

reminds the viewer that the ability to approach one's work with a child's sense of wonder and play, is the most important tool of all.

Susan Neel states: "nature prompts my passion to create." Her neckpieces are a sensitive interplay of dimensions. Line, plane, and form interact to communicate the delicacy, strength, and balance of the natural world. In one of her more linear neckpieces, delicate curves of silver wire are linked together to form the neckpiece. Dropping from the wire, darkened silver streamers enfold the edges of a half moon shaped agate. Beneath the stone, a brief line of silver wire underscores the piece's fluidity. Using sterling silver wire and sheet, along with semiprecious stones, Susan develops a calligraphy of nature.

Mia Seminson's contribution the show, *From Golden to Serpentine*, is a strikingly multidimensional piece. It is an exploration of the cultural, social, and personal significance of hair. At the same time it points to the relationship of jewelry and photography, particularly the emergence of photography and the demise of Victorian hair jewelry. The piece is comprised of a series of six computer generated color images transferred onto aluminum. The first and last prints in the series are mounted on wooden framed glass panels, behind which is a mass of disheveled hair. The back of the frame is also glass, so that when one looks at the photograph, it appears to be suspended in the frame upon a cloud of golden hair. The four central photos are framed in brushed aluminum. Each frame is connected to a matching frame, in accordion fashion, containing a concordant brooch and hairpin. The entire piece sits on a shelf hung from the gallery wall, and evokes an air of nostalgia, rather like photos seen on a mantelpiece. But the imagery is much more contemporary. The jewelry is simple and straightforward, which serves to underscore the directness of its design, as well as its meaning. The fourth diptych, *For My Beloved*, shows the image of a woman whose hair is either pulled back and bound in a severe bun or cropped short. The accompanying brooch is made up of three acrylic lenses set in silver. Behind the central lens is a black and white photograph of an eye. On either side the two smaller lenses reveal women's hair on one side, and a tangle of pubic hair on the other. The four diptychs represent a personal journal through which the artist investigates the assumptions and prejudices our society unthinkingly applies to hair. Although each element can stand on its own, the strength of the piece is in its entirety.

Eric Trabert's work adds power and finesse to the show's dimensions. The least figurative of all, Trabert's work is an investigation of shape, form, and sensual beauty. His technical skill and fine craftsmanship are the tools that enable him to produce these beautifully designed pieces. His neckpiece, *The Continuity of Movement*, is an elegant expression of line, form and motion. A three-sectioned pendulum is delicately suspended from a sterling silver neckwire. Attached to the wire, on either side of the pendulum, are two hemispheres transected by a heavy gold line, one vertical and the other horizontal, and set with a citrine in the center. Juxtaposed to the neckwire's almost mechanical appearance, the pendulum's split and forged bail sensuously wraps the wire. The upper element of the pendulum is a rounded, reticulated trapezoid with an oval garnet. The final element, a small citrine hangs like a punctuation mark at the bottom of the pendulum. Interestingly, rather than setting up a discordant tension, the organic tone of the reticulated elements harmonize with the mechanistic overtones of the neckpiece. His series of rings also demonstrate his ability to successfully blend strong, more formal, geometric forms with sensual textures and colors.

These artists, working individually and together, have managed to create a dimension which celebrates vision, imagery, structure, ornamentation, and passion.

Susan Wood-Onstad is a jeweler and writer living in northern California.

Life II: Amaryllis, (sculpture), 1995
wood, 22k yellow gold leaf,
sterling silver leaf, 2½" tall

Life II: Orchid Cattleya, (pendant), 1996
18k pink, green, white gold, diamond,
18k snake chain, (adjustable) 20" length
2 x 2 x ½" (20" chain)

New Works by Hiroko Sato-Pijanowski

Yaw Gallery
Birmingham, Michigan
May 16 – June 14, 1997

By Nicole DesChamps

Viewers have probably been most familiar with Hiroko Sato-Pijanowski and her collaborative works with Gene Pijanowski for these artists' introduction of the ancient Japanese technique of Mokume-Gane. Their research and determination became a quest for true mastery of process and technique in working with metal.

Pijanowski's new work continues to serve in her quest for technical excellence; but it also serves as an example of inner harmony. This new work invites the viewer to a celebration of life, to be overcome with joy and graced with beauty. The collection of work created to explore this new beginning was comprised primarily of wearable jewelry with the exception of two large tabletop sculptures. These sculptures, the focal points upon entering the gallery, realistically depict the maple seed and amaryllis plants in an exaggerated scale. *Life 1: Amaryllis,* a wood carving sealed with 22k yellow gold and sterling silver leaf, is portrayed as a real plant within an actual planter. Standing approximately two and a half feet tall, *Life 1: Amaryllis* emanates grandeur with its vertical thrust and sleek contour. Both of these naturalistic sculptures were strategically placed among the displays of jewelry and set a comforting, yet powerful, ambiance for the room.

Viewing the jewelry encased under glass continued the journey into elegance. This new jewelry is a culmination of work depicting organic forms. It is jewelry in the purest form, emphasizing its beauty when worn. The *Maple Seed* earrings suggest the development from seedlings to flowers. This notion is followed by the idea of maturity and life represented in the *Orchid* series. Untainted by obvious clichés or obtrusive concept, Pijanowski attains a rare level of both realism and wearability in her *Orchid* series. The work is straightforward and clear in its visual representation, as well as in its role as functional jewelry.

The *Orchid* series is a collection consisting of over thirty pieces including necklaces, pearl enhancers, brooches, and earrings. The individual pieces are based on six different species of orchids. Each work is delicately crafted to create an elegant form in splendid materials. However, it is the appreciation of the flower itself that becomes the crucial element in conveying Sato-Pijanowski's celebration of life.

Orchids are the largest known family of plants in the world and are found on all continents. Interestingly, the orchid has been cultivated for a variety of purposes: flower arrangements, corsages, medicine, aphrodisiacs, and even food. For centuries, this highly regarded flower has been associated with ornamentation and commendation.

Life II: Orchid Cattleya is based on one of the showiest of orchids, the original corsage flower. Like an actual corsage, *Life II: Orchid Cattleya* is intended to be worn to display its natural beauty and elegance. The petals and sepals are constructed of cast pink, green, and white 18k gold. The variety of gold colors accents several pave set diamonds, lavishly placed within the labellum. The flamboyant bloom can be separated from the 18k gold snake chain allowing it to be worn as a brooch or pendant. Like an orchid, *Life II: Orchid Cattleya* offers a unique, wearable piece for many occasions. The combination of high quality craftsmanship, precious materials, and the history and tradition of the orchid enhance the liveliness and beauty emulating from within the bloom.

In today's high tech and high stress society, we are too often caught up with daily activities and personal responsibilities. We have been conditioned by society to live in a fast paced world. It seems that we are all searching for the quickest means for a plausible end, and as a result, the preciousness of each and every day is lost. Hiroko Sato-Pijanowski's *Orchid* series signifies a fresh outlook, a new beginning, and an opportunity to celebrate and appreciate all of life's endeavors.

Nicole DesChamps is a metalsmith who currently resides in Ann Arbor, Michigan.

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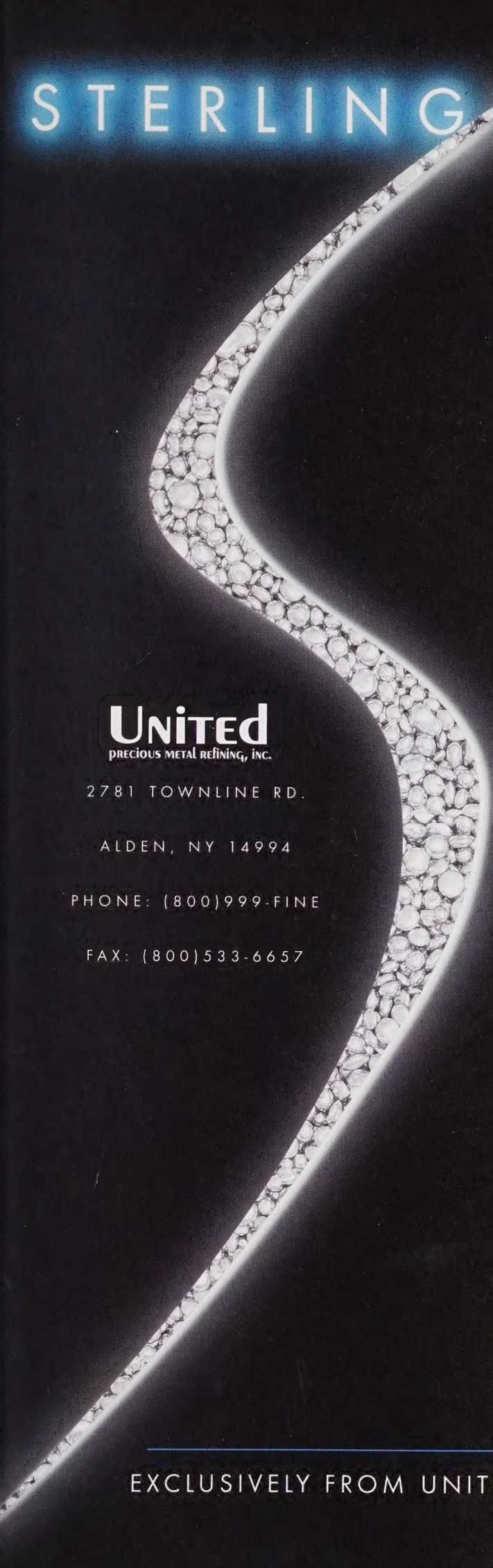

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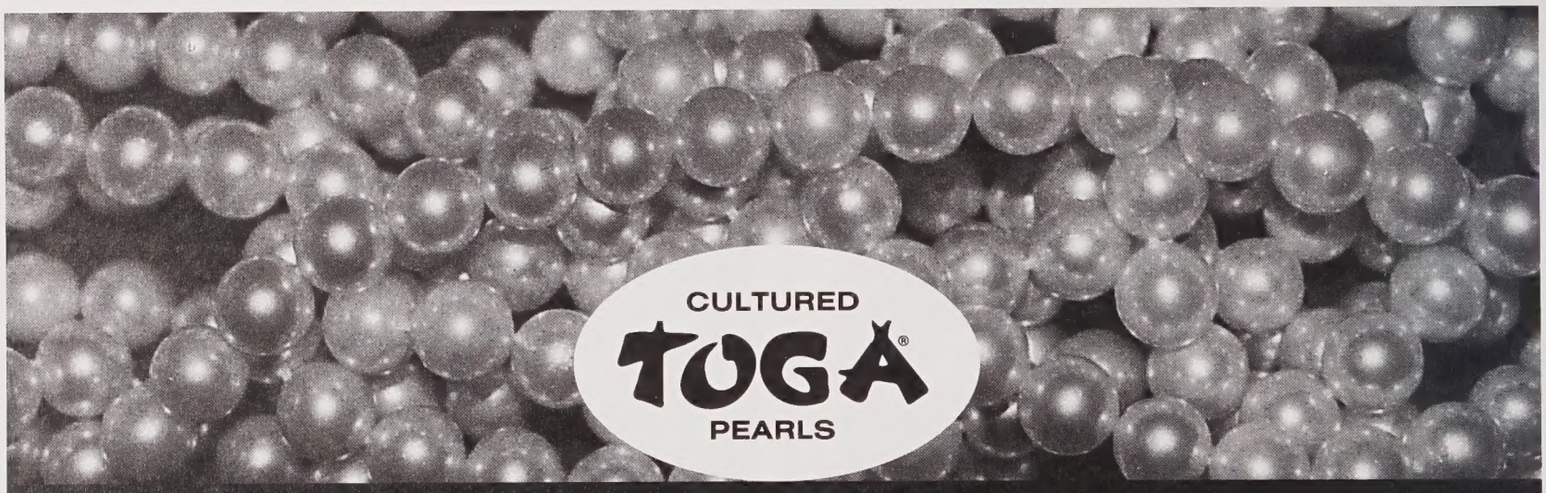

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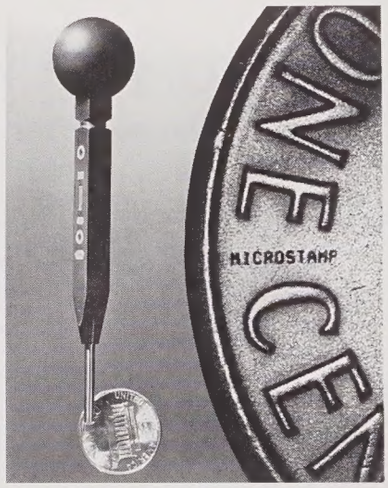

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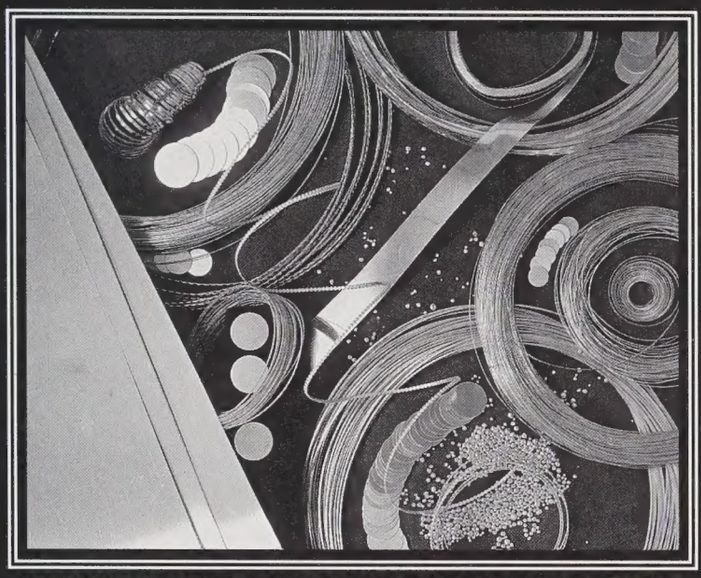

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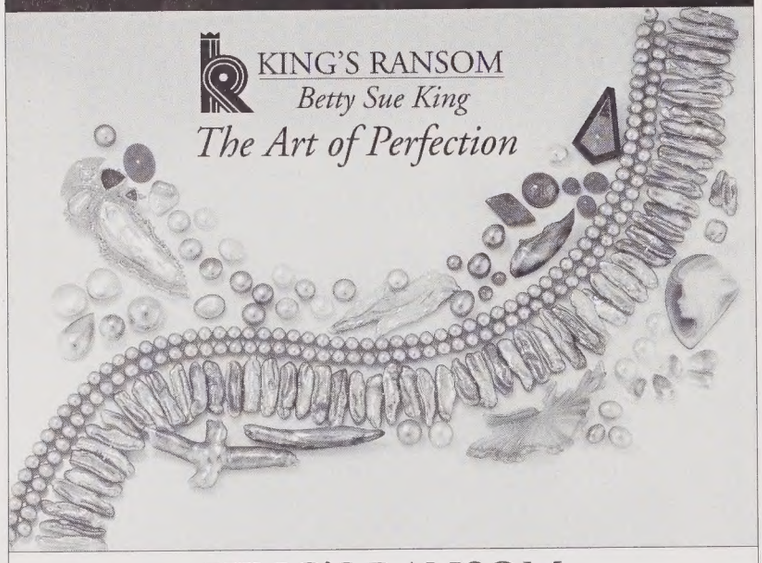

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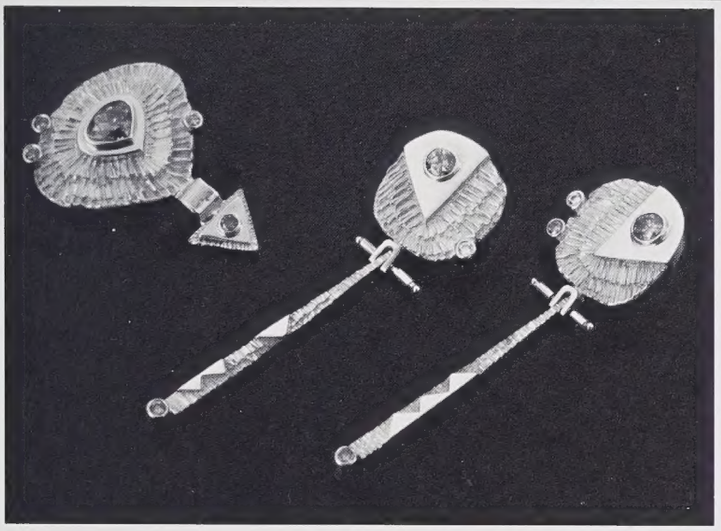

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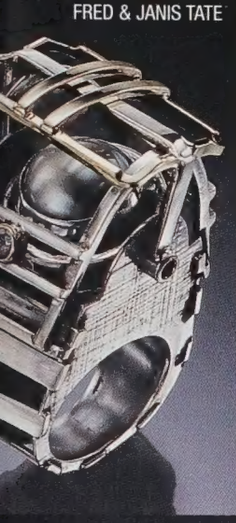

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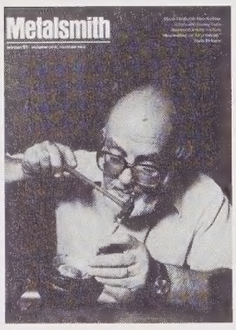

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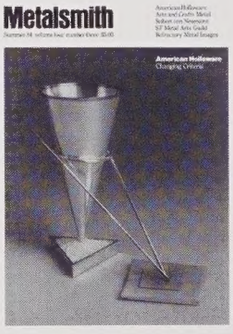

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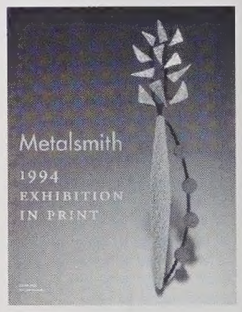

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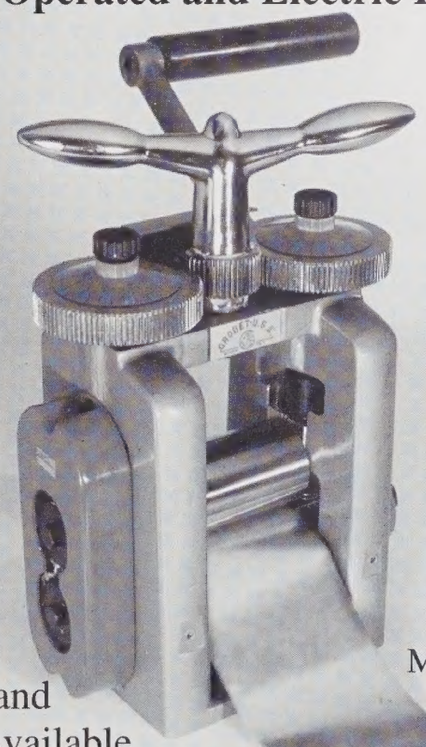

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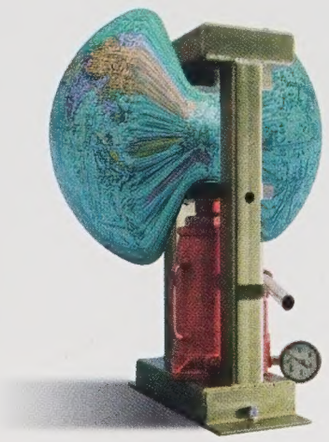

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- Toni Greenbaum, New York, NY: *"Aesthetics and Adornment in American Studio Jewelry 1940-1960"*
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- Lori Talcott, Seattle, WA: *"Northern European Folk Jewelry"*
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- The Rosen Group Buyers Market of American Crafts, February 13–16, Philadelphia, PA

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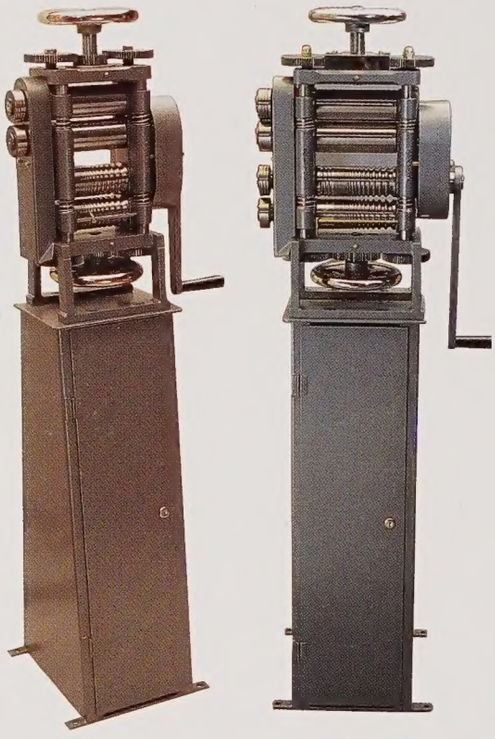

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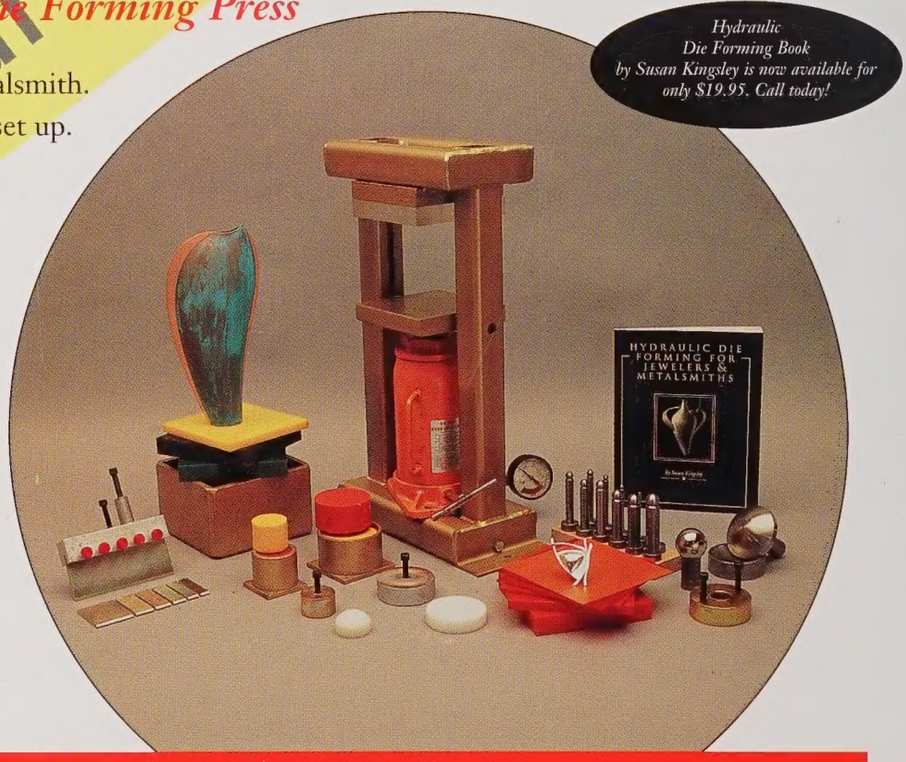

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